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ABSTRACT

This study of undergraduate grading practices at Georgia State University investigated differences in grading patterns by major fields of study, controlling for such antecedents as scholastic aptitude, demographic background, course type, and longitudinal trends. The principal finding of the study was that major field is strongly associated with the grades students receive in courses throughout the curriculum. This and previous grade studies support the proposition that the various parts of the curriculum have different grading standards. There has been a shift of course enrollments and majors away from the traditional curricula to the newer curricula. It is suggested that many students have been avoiding courses with traditionally stringent grading practices, creating a condition which might be called "degree inflation"; that is, more students are moving into degree programs which they find have grading standards reflecting their abilities and/or interests. Extensive data tables and statistical analyses are included. (Author/MSE)

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THE RELATIONSHIP OF MAJOR FIELD OF STUDY WITH UNDERGRADUATE COURSE GRADES:

A MULTIVARIATE ANALYSIS CONTROLLING FOR ACADEMIC AND PERSONAL CHARACTERISTICS AND LONGITUDINAL TRENDS

REPORT NO. 77–3

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
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OFFICE OF INSTITUTIONAL PLANNING

GEORGIA STATE UNIVERSITY

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Report No. 77-3

by

James E. Prather, John E. Williams, and Janet K. Wadley

Office of Institutional Planning
Georgia State University
August, 1976

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ABSTRACT

Previous research efforts in this series on undergraduate grading patterns at Georgia State University have been concerned with the grading patterns of college teachers and student grades in individual courses. This study investigated differences in grading patterns by major fields of study controlling for such antecedents as scholastic aptitude, demographic background, course type, and longitudinal trends.

The principal finding of the study was that major field of study is strongly associated with the grades students receive in courses throughout the curriculum. Majors tend to receive better grades in parts of the curriculum, while doing poorer in other parts. For example, English majors tend to receive relatively higher grades in teacher education courses than their other courses, while the grades they receive for physical science and foreign language courses are, on the average, lower. Physical science courses were generally more difficult for all majors, while teacher education courses were less difficult for all majors.

The literature on college grading practices contains the hypothesis that grading patterns for different major fields is a reflection of adaptation level theory where a component of the curriculum adopts grading standards that match the aptitude level of the students in the field. This and the previous grade studies support the proposition that the various parts of the curriculum have different grading standards.

This study focused on grading trends by major field over time. The contemporary concern about "grade inflation" was a motivating factor for these grade studies, which have been requested by several University Self-Study Committees. Grades have been increasing for a number of years in higher education, while student population aptitude scores have been decreasing. Most major fields exhibited a greater level of systematic inflation than grades in individual courses. Based upon this and previous research on final-letter-grade patterns, a supposition is offered:

> Teachers as a group are not haphazardly giving higher grades (grade inflation). Rather, within the student population, there has been a shift in course enrollments and majors away from the traditional curricula to the newer curricula. It is suggested that many of the students involved in this shift have been exercising their prerogatives in order to avoid courses with traditionally stringent grading practices, thus creating a condition which might be termed "degree inflation"; that is, more students are moving into degree programs which they find have grading standards reflecting their abilities and/or interests.

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THE RELATIONSHIP OF MAJOR FIELD OF STUDY WITH UNDERGRADUATE COURSE GRADES: A MULTIVARIATE ANALYSIS CONTROLLING FOR ACADEMIC AND PERSONAL CHARACTERISTICS AND LONGITUDINAL TRENDS

> There has been a marked move away from specific course requirements toward distribution requirements, for which the student selects from among a more or less specified set of course offerings . . . The general education curriculum today is much less structured than it used to be. (Blackburn et al., 1976, p. 33)

The recent changes in programs of study throughout higher education have resulted in a changing mix in course offerings. Students have been given increased freedom from general requirements, and they have chosen more frequently to increase their courses in their major field of study.

The grades that students receive in their educational experience are an integral component of their program of study. Thus, the controversy concerning the distribution of grades in higher education must necessarily be concerned with the impact and interaction of grades with the student's major.

A brief review of what is popularly called "grade inflation" illustrates the need for considering the effect grades have on programs of study offered by post-secondary institutions. Grade inflation has been identified--but not defined--as being exhibited in:

- An increased number of graduation honors being awarded as student quality decreases (Bolin, 1975).
- A hypocrisy in grading standards, where "wishy-washy grading" is misleading the students about their abilities and achievement (Etzioni, 1975).
- Colleges and faculty are "buying" students with cheaper grades in attempts by faculty to increase their popularity (renumeration) or colleges to increase their enrollment (revenues)(McKenzie, 1975).

These lamentations about declining standards have generally been suppositions about grading practices and have not usually been tested as hypotheses.

The research question of this study is: What has happened to grading practices in relation to the substantial changes in and additions to the curriculum during recent years at Georgia State University? The dynamic interaction of major field choice and grades received by students should provide insight and information relevant to how the curriculum affects cumulative grade point averages (GPA).

Review of the Literature

A student's choice of major field has been shown to be indicative of his background characteristics and abilities. Elton and Rose (1967) presented findings that students in different major fields exhibit differing personality traits. A study by Goldman and Warren (1973) found that the scholastic strategies and approaches of students vary among major fields of study.

Grading standards themselves have been shown by Goldman et al. (1974) as differing among major fields. They noted that "the fields which contain the lowest ability students award the highest grades for a given ability level. This is akin to easy grading standards for the fields with the lowest ability students" (p. 349). This evidence was based upon aggregate data--GPA's--and thus did not answer the key question of how students with different majors perform in the same courses. Goldman and Widawski (1976) designed a study where grades for individual courses were compared based upon students who had taken similar courses--e.g., both biology and urban studies--and found these students tend to receive lower biology grades by a factor of -.53

of a letter grade, while the same student group had higher grades in urban studies by .39 of a letter grade compared with their overall average grade for the common courses. "It seems clear that different grading standards exist for different departments within the same university. Some of these differences are quite substantial" (p. 389). When they related grading standards to student ability levels, they noted that "this circumstance implies that professors in a field containing students with high HSGPA's [high school grade point averages] will tend to grade more stringently than will professors in fields with lower HSGPA students" (pp. 388-389). Goldman and Widawski surmise this behavior of differential grading standards is the operation of adaptation-level theory (Helson, 1947). The adaptation-level explanation shows that students are judged relative to their peers, not on an absolute basis. This is similar to McDonald (1966) who noted that, based on a survey of faculty teaching introductory level courses at Georgia State University, the faculty stated they were grading on an absolute scale, but the empirical distribution of their grades tended to be relative to the ability levels of their students.

A course-by-course study by Prather and Smith (1976b):

> shows in many instances congruence between course grading patterns within a particular discipline and also between similar disciplines, but incongruence between dissimilar disciplines. Quantitative type courses tend to have stringent grading standards across department and school lines. Thus, it appears that grades are influenced to no small degree by the associated discipline and the values assigned to grades by the discipline. If there is a shift of the student body to course programs with lenient grading standards, then there will be a normal shift to a higher GPA. (pp. 34-35).

The course-by-course analysis did not exhibit the dramatic "grade inflation" shown by the increases in aggregate measures such as GPA, proportion of A grades or graduation honors awarded. There was a trend for the courses with lenient grading patterns toward slightly adjusting grades downwards.

While the stringent grading courses often had an increase in grades over time, these courses remained conservative in grading patterns. "With regard to grade inflation, there is not a secular trend of it occurring systematically throughout the course offerings" (p. 34). The trend is more grade convergence than grade inflation.

Contemporary students can avoid "poor" grades through several avenues. For instance, when the student perceives a course to be one where low grades are a higher likelihood, the student has available these options: 1) withdraw and wait for an "easier" teacher, 2) seek a substitute course if it is a requirement, 3) take the course at another institution, or 4) change to a less stringent grading major field.

Surveys of faculty have also shown that grading practices vary with the faculty member's discipline. "In the area of grading practices," Oh (1976) wrote, "the natural scientists seemed to have strong confidence in their grading practices, and the social scientists were on the middle ground. The humanities faculty had moderate confidence in their grading practices." Oh noted that the natural science fields use these criteria: mastering course objectives, work quality and skills learned, while social science faculty employed: mastery of course objectives and quality of work. There was one criterion used by the humanities teachers: work quality.

The relationship of the personal and academic background attributes with grade distribution was studied by Prather and Smith (1976a). They found that while there existed some weak association between grades and teacher attributes, the strongest indicators of grade distribution were course discipline designations. It was reported that:

> Courses showing a tendency to have proportionately higher grades at the undergraduate level include: special education; curriculum and instruction; health, physical education, recreation and safety; and early childhood.

> Courses showing a tendency to have proportionately lower grades at the undergraduate level include: developmental studies; accounting; music; vocational and career development; information systems; chemistry; and decision mathematics.
>
> Courses which had a higher grading pattern also indicated fewer withdrawals. (p. 44).

Purpose

This study is part of a series on student grades being conducted at the request of several University-wide Self-Study Committees. The aim of this research effort is to provide an analysis of undergraduate grades at Georgia State University as they relate to major fields of study. The study seeks also to place grades within the general context of the dynamics of higher education by relating grades to the background characteristics of the students. The questions this research is designed to answer are: 1) what is the relationship between major fields of study and grades received; and 2) what is the longitudinal pattern of grades received and major field of study.

Plan and Limitations of the Study

The secular trend of student grades is investigated by major fields of study. "Grade inflation" is operationally defined as a systematic increase in grade distributions over time after controlling for ability level and background characteristics. The term systematic increase in grades is emphasized because an increase in grades may be due to increased learning. However, if grades increase every year for five years, there is stronger evidence of inflation in grading practices, as compared to annual fluctuations in grades.

The study population consists of 8,735 undergraduate students who had attempted at least 40 credit hours at Georgia State University as of Fall Quarter, 1975. The variables consisted of the individual course grades received, along with the quarter and year the course was taken, for a maximum of 40 courses. Additional variables included background characteristics of students such as sex, minority status, and age. The academic variables selected were cumulative grade point average (GPA) at Georgia State University, major field of study, Scholastic Aptitude Test (SAT) scores, high school GPA, credit hours attempted, credit hours earned, credit hours transferred to Georgia State University and transferred college GPA.

Each grade received, along with the student's other characteristics, formed a case. For example, if a student had thirty grades, then thirty cases would be recorded for that student.

The analysis was performed for each major whenever enough data was available. This approach is similar to that of Goldman et al. (1974). Though the Goldman studies and other similar efforts have used the aggregate GPA as the focus of the study, this study disaggregates to the individual grade level. Both Schoenfeldt and Bush (1975) and Goldman and Slaughter (1976) have noted that the cumulative GPA is largely a heterogeneous mixture of courses which is indicative of low reliability, and this research design avoids the unreliability of aggregate grades.

It is not possible to account for all factors that may influence grades. Such student characteristic variables as personality, artistic ability and the like, are not controlled for. Only those variables available in the computerized student data base could be included in the study.

Another limitation is that no criteria external of grades themselves, such as standardized achievement tests, are available to account for learning--i.e., maturation effects--by students. Thus, the proposed test of grade inflation is most liberal and our estimates of grade inflation contain a maturation component. That is, the bias is toward finding grade inflation, and the actual amount of grade inflation itself is certainly lower than our crude estimates.

Research Design

In the previous grade analyses (Prather and Smith, 1976a, 1976b), the model used was the general linear model, also known as regression analysis. This study uses the same model. The rationale for the use of regression is based upon practical and theoretical justifications. Regression analysis allows maximum design flexibility and is statistically robust. In light of the large amount of data in this study, regression analysis provides an effective technique for presenting the diverse nature of the data while maintaining a consistent analysis rationale.

The specification of the regression model for the analysis of the major fields includes these aspects:

(1) The regressand, or dependent variable, in each case is a final letter grade, scaled on the 4.0 system (i.e., A = 4, B = 3, C = 2, D = 1, F or WF = 0). The grades of incomplete, withdrawal, or audit are excluded from the analysis.

(2) The regressors, or independent variables, are the personal background characteristics of ability and academic variables, which are intended as statistical controls.

(3) Additional regressors are the types of courses, expressed in the form of dummy variables. This allows the curriculum factor to be accounted for.

(4) The year the course was taken was expressed in dummy variables for five of the six years covered by the grades. The dummy variables for 1971 to 1975 are specified for the purpose of estimating the change in grades that is associated with longitudinal factors.

(5) Certain variables included in the analysis were not available for all students. Missing data was found to be present for SAT scores, high school GPA's and age. The mean value was substituted for missing data elements. To ascertain the impact of missing data elements, the procedure developed by Cohen (1968) was employed. The technique allows an objective measure of the impact of missing data. This is done by the inclusion of "missing data" dummy variables which measure the relationship between missing data for a particular variable and the regressand.

Our search for the best regression equation for each major is admittedly raw empiricism. The equations are meant to be a starting point for discussion and further analysis. We have sought to increase the body of substantive knowledge concerning grading patterns by using an analysis model that is theoretically plausible while being guided by both substantive and statistical criteria.

Overview of the Major Field of Study Equations

To highlight the various secular trends of grades by the major fields, a summary chart is presented. This chart was prepared from the 63 individual equations. Chart 1 includes the sample mean grade from the major, the five regression estimators pertaining to year-the-course-was-taken, the constant term, the adjusted R^2, the number of grades the equation is based upon, and the number of individual students in that major. The reason for including the constant term is to allow an interpretation of the sample mean grade controlling the background variables of the students. The higher the constant term, the higher the grades received by students, independent of their measured scholastic aptitude and past performance.

Limiting the discussion to those majors having over ten students in the study population, there are 56 majors which account for 99.4% of the total of 189,013 grades in the study. The summary highlights are:

- Those majors with a sample mean grade over 3.0, when compared to the constant term, showed early childhood education to have an .86 constant, -.15 for special education, 1.02 for music, -.10 for French, .18 for community health nutrition, -.48 for physical therapy, -.32 for mental health assistants.
- The longitudinal increase in grades (which includes maturation, however) illustrates that 50 of the 56 majors had an overall upward trend in grades, with art education majors having the highest net increase. German majors showed an overall net decrease in grades.
- There was an overall grade increase factor of .25 of a letter when the net difference in the 1971 and 1975 estimators were weighted by the number of grades in each major.

CHART 1

SUMMARY BASED UPON REGRESSION EQUATIONS FOR SIXTY-TWO MAJORS AND UNDECLARED STUDENTS
(TABLES 1 TO 63)

Table No.	Major	Sample Mean Grade	Regression Estimators 1971	1972	1973	1974	1975	Constant	R^2 (Adjusted)	N (Grades)	No. of Majors
1	Community Development	2.47	.63	.64	1.26	1.17	1.22	-12.75	.26	179	9
2	Foreign Area Studies	2.19	-.25	-.01	-.16	-.35	-.38	.16	.27	160	5
3	Biology	2.61	-.04	-.06	.07	.18	.26	-.26	.38	6649	283
4	Accounting	2.63	.09	.14	.17	.25	.34	-.32	.40	15452	776
5	Actuarial Science	2.79	-.03	-.44	-.08	-.04	-.05	-.51	.41	775	37
6	Economics	2.67	-.28	-.12	-.12	.03	-.004	.07	.31	3327	82
7	Finance	2.67	-.07	.18	.22	.30	.50	-.35	.41	3020	148
8	Insurance and Risk	2.57	-.12	-.08	-.02	.15	.20	-.42	.39	1111	51
9	Management	2.54	.14	.14	.24	.30	.39	-.01	.35	15682	770
10	Marketing	2.49	.10	.13	.27	.31	.35	.06	.31	6794	315
11	Real Estate	2.46	.06	.003	.10	.21	.28	-.10	.30	2916	129
12	Communications	2.57	-.06	.03	.22	.32	.39	-.31	.36	1750	84
13	Journalism	2.65	-.04	-.10	-.02	.07	.11	.19	.41	5789	280
14	Information Science	2.63	-.33	-.44	-.10	-.09	-.07	-.60	.37	459	25
15	Art Education	2.72	.04	.39	.79	.56	.89	-.83	.39	355	21
16	Business Education	2.67	-.12	.01	.04	.01	.14	.53	.39	2059	98
17	Early Childhood Education	3.07	-.44	-.48	-.35	-.13	-.09	.86	.45	2928	146
18	Elementary Education	2.89	.0[illegible]	-.01	.04	.19	.22	.37	.46	6578	60
19	Physical Education	2.68	.21	-.16	-.30	.04	.17	.95	.43	986	56
20	Secondary Education	2.84	.36	.27	.34	.44	.58	-.52	.36	3039	144
21	Special Education	3.04	.11	.21	.31	.51	.50	-.15	.46	5028	216
22	Art	2.69	.58	.56	.64	.73	.83	-.52	.31	1092	59
23	Music	3.04	.20	.36	.30	.32	.23	1.02	.28	4198	139
24	Studio	2.75	-.10	-.13	-.08	.06	.08	.10	.32	6842	350
25	French	3.07	-.07	.11	.06	.19	.30	-.10	.39	498	26
26	German	2.92	.51	.03	.30	.32	.40	-.15	.33	672	30
27	Spanish	2.85	.19	.18	.22	.30	.18	.27	.50	975	42
28	Community Health Nutrition	3.02	.52	.41	.52	.60	.71	.18	.43	397	18
29	Health Administration	2.70	.18	.40	.43	.43	.61	.37	.38	1072	53
30	Medical Technology	2.74	.28	-.001	.11	.26	.22	-.32	.38	2537	122
31	Nursing	2.76	.09	.07	.13	.32	.31	-.35	.45	7929	340
32	Physical Therapy	3.09	.36	.37	.64	.81	.89	-.48	.42	1905	83
33	Classics	3.34	.44	1.10	.93	1.34	1.41	.04	.35	126	6
34	English	2.84	-.01	.11	.20	.28	.28	-.18	.37	5237	241
35	Philosophy	2.80	.02	.10	.16	.25	.35	-.26	.32	969	48
36	Mathematics	2.75	.08	-.02	.05	.12	.11	.03	.44	3086	144
37	Chemistry	2.83	.12	.26	.30	.29	.36	-.39	.49	1782	72
38	Geology	2.79	.57	.60	.63	.74	.88	-.74	.35	1081	51
39	Physics	2.82	-.27	.17	.07	.16	.15	.60	.40	397	22
40	Psychology	2.89	.10	.10	.23	.30	.35	-.19	.38	10187	271
41	Anthorpology	2.93	-.08	.20	.34	.38	.55	-.33	.36	2152	94
42	Community Relations	2.65	.21	.36	.34	.51	.59	.23	.28	355	17
43	Criminal Justice	2.53	.05	.06	.12	.16	.26	.34	.32	8133	386
44	Financial Security Program	2.60		-.06	.04	.19	.13	.15	.27	170	9
45	Geography	2.84	.18	.37	.39	.34	.46	-.10	.28	769	31
46	History	2.70	.03	.10	.11	.16	.25	.05	.41	3441	162
47	Housing Administration	2.88	1.07	1.03	1.05	1.26	1.49	-1.06	.42	128	4
48	Land Development	2.49	.14	.17	.14	.37	.36	.46	.40	1472	66
49	Political Science	2.73	-.08	-.08	.11	.13	.16	.27	.39	3901	191
50	Social Welfare	2.65	-.21	-.01	.04	.16	.30	-.05	.35	2283	111
51	Sociology	2.67	.02	-.003	.06	.15	.20	.001	.46	3408	170
52	Urban Administration	2.67	.48	.60	.65	.78	.82	-.50	.37	1635	74
53	Urban Economics	2.89	-.31	-.29		-.01	-.38	.77	.56	148	5
54	Urban Government	2.43	.97	.21	.56	.98	.96	-2.82	.46	164	10
55	Associate of Art	2.47	.12	-.10	.36	.56	.55	1.15	.37	307	19
56	General Studies	2.35	.02	-.17	-.04	.15	.31	-.29	.43	1584	115
57	Commercial Music Recording	2.53	.14	.36	.48	.63	.70	-.53	.41	689	46
58	Hotel/Motel Management	2.67	-.66	-.87	-.88	-.61	-.64	1.41	.47	586	36
59	Secretarial Science	2.57	-1.13	-1.15	-.96	-.89	-1.01	.79	.45	811	47
60	Mental Health Assistants	3.01	.30	.33	.29	.50	.59	-.32	.50	1132	59
61	Pediatric Assistants	2.98	.27	-.09	.08	.25	.42	.25	.47	474	27
62	Respiratory Therapy	2.79	.34	.26	.29	.27	.26	.12	.28	1493	78
63	Undeclared Majors	2.46	.06	.06	.13	.22	.29	-.15	.39	17760	1126

Analysis of Major Field

The analysis consisted of 63 regression equations. Sufficient data allowed 62 majors to be analyzed and, in addition, those students with no recorded or declared majors were included. The procedure for analyzing a major consisted of three parts. First, a statement was presented concerning the percentage of variation (the R^2 is adjusted for the degrees of freedom, yielding a conservative estimate) in the major field as affected by the independent variables included in the analysis. Next, the grading trend during the period from 1971 to 1975 was evaluated to note the secular trend. As revealed by the estimators, the course areas in which the major field performed better or worse than the average were stated. Finally, other variables included in the analysis that had either a strong positive or negative effect were noted. The 63 regression equations were based upon 8,735 students and a total of 189,013 individual course grades.

Each regression equation is presented in a separate table (pp. 12-137) along with a basic summary of the principal findings for that major. These interpretations are not meant to be exhaustive; rather, they are intended to serve as a guide to enable a reader to explore the complex relationships presented in each equation. The guide for each table summary was based upon those variables having regression estimators at least twice their standard error of estimator. The order of the variables in each equation was based upon the step-wise regression algorithm. This ad hoc procedure allows the variables to be ordered, according to the amount of orthogonal variance accounted for by entered variables in respect to the regressand (the course grade). The year-the-course-was-taken dummy variables were specified to be entered in first, followed by the other variables. The ranking of the variable is solely empirical, and is not intended to reflect the theoretical or conceptual importance of a particular variable.

The selection of majors to be included in the study was based upon the following criteria: all major fields that had registered at least 100 grades were included; a major field was included from each general academic area. The range that resulted from this selection process was from four majors and 128 grades for Housing Administration majors, to 1126 Undeclared (Baccalaureate degree) with 17,760 grades.

The order of the 63 individual major tables is based upon the taxonomy of instructional programs delineated by the Higher Education General Information Survey (HEGIS). This standardized list is used by many higher educational units and thus as data are released, comparison using academic discipline based data is feasible (Huff and Chandler, 1971). For example, degrees awarded, programs of study enrollments and other information necessary to evaluate curricula are frequently to be found in other universities by the HEGIS taxonomy. But we should remind the reader that the HEGIS taxonomy is a means to studying higher education curriculum, and this is not intended to be an advocacy by the authors for a particular curriculum structuring.

AN ANALYSIS OF TABLE 1, COMMUNITY DEVELOPMENT MAJORS

* Due to the small number of majors (9), valid statistical conclusions cannot be stated as significant; however, the findings will be presented in order that some notion of causal effect is conveyed.

The adjusted R^2 was .26. The highlights may be summarized as follows:

* Although the estimator increased significantly from 1971 to 1975 (from .63 to 1.22), the trend was rather stable during the period from 1973 to 1975. This total change in the estimator from 1971 to 1975 represents an increase of .59 of a letter grade.

* Community Development majors perform on the average better in the following courses: SPCH (2.24); AC (2.16); ENG (1.19); GEOG (1.05); and POLS (1.07).

* There were no course areas having a significant negative impact on Community Development majors.

* Other variables included in the analysis had no significant effect on Community Development majors.

TABLE 1

REGRESSAND: GRADES IN ALL COURSES FOR COMMUNITY DEVELOPMENT MAJORS

Sample Mean = 2.47 S.D. = 1.00 N = 172

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	1.22	.67	.59
	74	1.17	.64	.55
	73	1.26	.67	.45
	72	.64	.66	.15
	71	.63	.61	.17
GPA		.15	.06	.05
IM		-.74	.66	-.10
PHYS		-.83	.75	-.09
Freshman Course		-.14	.31	-.07
SPCH		2.24	.68	.29
AC		2.16	1.00	.16
CHEM		-.01	.64	-.002
MATH		.63	.48	.17
Female		-.83	2.24	-.41
GEOL		.60	.52	.13
RE		.62	.52	.15
Age		.10	.09	.25
ENG		1.19	.45	.44
GEOG		1.05	.46	.31
MUS		1.30	.78	.14
POLS		1.07	.51	.24
HPRS		1.35	.76	.15
Missing Data--H.S. GPA		-.96	1.52	-.48
CJ		1.28	.73	.17
PSY		1.29	.70	.17
HIST		.85	.43	.30
SOC		1.00	.51	.23
EC		1.07	.55	.24
BL		1.02	.72	.13
MK		1.09	1.01	.08
GER		.77	.98	.06
BIO		.79	.76	.08
IS		.76	.81	.08
UL		.58	.69	.08
PHIL		.69	.78	.07
SAT--Verbal		.001	.12	.002
Senior Course		.11	.30	.04
MGT		.49	1.03	.04
High School--GPA		3.45	8.05	.26
Sophomore Course		-.06	.32	-.03
Hours Transferred		-.003	.02	-.06
Constant		-12.75		

R^2 = .43

R^2(Adjusted) = .26

Standard Error of Estimate = .86

Number of Majors = 9

HEGIS Code: 0206

AN ANALYSIS OF TABLE 2, FOREIGN AREA STUDIES MAJORS

- Due to the small number of majors (5), valid statistical conclusions cannot be stated as significant; however, the findings will be presented in order that some notions of causal effect is conveyed.

The adjusted R^2 was .27. The highlights may be summarized as follows:

- Between 1971 and 1973 the grading trend was rather unstable; the period from 1972 showed an increase in the estimator from -.25 to -.01 or approximately .25 of a letter grade. On the other hand, the period from 1972 to 1973 showed a deflation of a letter grade by .55. The grading trend has been rather stable since 1973.

- On the average, Foreign Area Studies majors performed better in MUS (.64); BED (1.04); and HPRS (.97). (None of these positive weights were significant at the 95% confidence interval).

- Foreign Area Studies majors performed worse than the average in the following course areas: BIO (-2.84); IS (-3.36); PHYS (-2.57); MATH (-1.51); SOC (-1.06); ENG (-1.01); and HIST (-.77). (None of the negative weights were significant at the 95% confidence interval).

- Other notable variables affecting the performance of Foreign Area Studies majors were: Senior Course (.62); and Female (-.27). (Neither was significant).

TABLE 2

REGRESSAND: GRADES IN ALL COURSES FOR FOREIGN AREA STUDIES MAJORS

Sample Mean = 2.19   S.D. = 1.06   N = 160

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	-.38	.56	-.12
	74	-.35	.55	-.14
	73	-.56	.50	-.23
	72	-.01	.49	-.003
	71	-.25	.49	-.08
SPAN		.22	.31	.07
BIO		-2.84	.71	-.30
GPA		1.00	.75	.20
MUS		.64	.68	.08
IS		-3.36	.97	-.25
PHYS		-2.57	.96	-.19
BED		1.04	.74	.11
FR		.21	.46	.04
Senior Course		.62	.31	.23
MATH		-1.51	.60	-.22
SOC		-1.06	.36	-.29
ENG		-1.01	.37	-.25
HIST		-.77	.31	-.24
HPRS		.97	1.00	.07
PSY		-.83	.41	-.18
GEOG		-.75	.35	-.19
POLS		-.70	.35	-.17
Junior Course		.24	.30	.10
GEOL		-.58	.48	-.10
PHIL		-.56	.74	-.06
GER		-.78	.98	-.06
EC		-.32	.44	-.07
Female		-.27	.32	-.11
Age		.04	.08	.05
Hours Attempted		-.001	.004	-.04
Sophomore Course		.05	.28	.02
CHEM		-.07	.72	-.01
Constant		.16		

R^2 = .42

R^2(Adjusted) = .27

Standard Error of Estimate = .90

Number of Majors = 5

HEGIS Code: 0399

AN ANALYSIS OF TABLE 3, BIOLOGY MAJORS

The adjusted R^2 was .38. The highlights may be summarized as follows:

- While stable from 1971 to 1972, the estimators since 1972 to the present indicate an inflationary trend (from -.06 to .26) that is equivalent to .20 of a letter grade over a three year period.
- On the average, Biology majors performed better in the following course areas: PSY (.32); MUS (.38); ECI (.71); and FED (.58).
- Notable course areas in which Biology majors on the average performed worse in are: CHEM (-.30); HIST (-.39); PHYS (-.31); BIO (-.16); and POLS (-.26).
- Other notable variables affecting Biology majors: Hours Transferred had a negative impact (-.001); age had a positive effect (.01), as the older a student, the better the performance tended to be; also, Biology majors tend to do better in freshman courses.

TABLE 3

REGRESSAND: GRADES IN ALL COURSES FOR BIOLOGY MAJORS

Sample Mean = 2.61 S.D. = 1.04 N = 6649

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.26	.10	.12
	74	.18	.10	.08
	73	.07	.10	.03
	72	-.06	.10	-.02
	71	-.04	.11	-.01
GPA		.97	.02	.58
PSY		.32	.07	.05
MUS		.38	.09	.05
ECI		.71	.17	.04
CHEM		-.30	.05	-.12
HIST		-.39	.06	-.09
FED		.58	.16	.04
MATH		-.28	.06	-.07
Hours Transferred		-.001	.0004	-.03
SPAN		.15	.10	.02
PHYS		-.31	.06	-.07
BIO		-.16	.04	-.06
Sophomore Course		-.05	.04	-.02
GER		-.39	.10	-.04
POLS		-.26	.08	-.04
Age		.01	.003	.03
AC		-.45	.16	-.03
ART		-.37	.12	-.03
DM		-.41	.17	-.02
SPCH		.33	.18	.02
Hours Attempted		.001	.0003	.03
Freshman Courses		.10	.04	.05
FR		-.19	.09	-.02
Missing Data--SAT Math		.04	.03	.02
Veteran		-.06	.03	-.02
SOC		.16	.10	.02
EC		.17	.12	.02
SAT--Verbal		.0002	.0001	.01
UL		.83	.58	.01
BED		.25	.19	.01
MK		.29	.22	.01
PHIL		-.10	.09	-.01
GEOG		-.24	.20	-.01
CJ		.32	.34	.01
GEOL		-.13	.15	-.009
Minority		-.03	.03	-.01
BL		.38	.41	.009
IS		-.12	.15	-.01
NURS		-.28	.37	-.01
Transfer-GPA Indicator		-.01	.01	-.01
RE		-.20	.37	-.01
HPRS		-.15	.41	-.004
JOUR		-.10	.28	-.003
Missing Data--H.S. GPA		.01	.04	.01
ENG		.02	.06	.005
Senior Course		.01	.04	.003
Female		.01	.02	.003
Missing Data--Age		.01	.05	.002
High School--GPA		-.003	.02	-.001
Constant		-.26		

R^2 = .39

R^2(Adjusted) = .38

Standard Error of Estimate = .82

Number of Majors = 283

HEGIS Code: 0401

AN ANALYSIS OF TABLE 4, ACCOUNTING MAJORS

The adjusted R^2 was .40. The highlights were summarized as follows:

- The grading trend for Accounting majors from 1971 to 1975 reflects an average increase in the estimator of .69. As a result of this upward trend, a grade inflation factor of .25 of a letter grade developed between 1971 and 1975.
- On the average, Accounting majors did better in the following course areas: BED (.51); EC (.17); BL (.27); MGT (.25); and HPRS (1.23).
- Accounting majors on the average performed worse in the following course areas: AC (-.22); HIST (-.49); BIO (-.64); ENG (-.16); POLS (-.27); IS (-.18); and CHEM (-.41).
- Other variables significantly affecting Accounting majors were: Senior Course (-.19); and Hours Attempted (.0008).

TABLE 4

REGRESSAND: GRADES IN ALL COURSES FOR ACCOUNTING MAJORS

Sample Mean = 2.63 S.D. = 1.06 N = 15452

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.34	.06	.15
74	.25	.06	.11
73	.17	.06	.06
72	.14	.06	.04
71	.09	.06	.02
GPA	.96	.01	.58
AC	-.22	.04	-.09
HIST	-.49	.05	-.08
BIO	-.64	.08	-.05
ENG	-.16	.04	-.04
POLS	-.27	.05	-.04
IS	-.18	.05	-.03
HED	.51	.07	.06
Junior Course	-.01	.03	-.004
Transfer-GPA Indicator	-.03	.007	-.04
EC	.17	.04	.04
BL	.27	.05	.05
MGT	.25	.04	.05
Senior Course	-.19	.03	-.07
Hours Attempted	.0008	.0002	.04
HPRS	1.23	.31	.02
CHEM	-.41	.10	-.03
Missing Data--H.S. GPA	.03	.02	.01
MUS	.32	.10	.02
INS	.19	.05	.03
RE	.14	.05	.02
PHIL	-.20	.08	-.02
GEOL	-.25	.07	-.03
MK	.10	.05	.02
SPCH	.22	.11	.01
SPE	.74	.31	.01
Age	.004	.002	.02
Veteran	-.04	.02	-.02
PHYS	-.32	.12	-.02
MATH	-.16	.07	-.02
FED	.37	.17	.01
Freshman Course	.07	.03	.03
Hours Transferred	.0004	.0002	.01
AS	-.49	.31	-.01
ECI	.29	.23	.008
GEOG	-.09	.07	-.01
Minority	-.02	.02	-.008
Missing Data--Age	.05	.05	.007
FR	-.22	.21	-.007
UL	.32	.34	.006
Missing Data--SAT Math	.02	.02	.009
PSY	.03	.06	.004
SAT--Math	.0001	.0001	.004
JOUR	-.15	.17	-.006
ART	-.14	.21	-.004
SOC	.02	.05	.002
Female	-.01	.02	-.004
SPAN	-.08	.17	-.003
DM	-.02	.04	-.005
SAT--Verbal	.0001	.0001	.003
High School--GPA	.004	.02	.002
GER	-.04	.21	-.001
CJ	-.03	.15	-.001
Constant	-.32		

R^2 = .41

R^2(Adjusted) = .40

Standard Error of Estimate = .82

Number of Majors = 776

HEGIS Code: 0502

AN ANALYSIS OF TABLE 5, ACTUARIAL SCIENCE MAJORS

The adjusted R^2 was .41. The highlights may be summarized as follows:

- * There was considerable grade deflation from 1971 to 1972, as the estimator decreased from -.03 to -.44 or a .41 drop in a letter grade; however, in 1973 the estimator returned to a relative 1971 position at -.08 and the grading trend stabilized from this point through 1975.
- * Actuarial Science majors on the average performed better in the following course areas: PSY (.42); RE (.43); and EC (.19). (None of these positive weights were found to be significant at a 95% confidence interval).
- * On the average, Actuarial Science majors performed worse than average in the following course areas: AS (-.72); and HIST (-.60).
- * Other notable variables impacting Actuarial Science majors were: Senior Course (.34); and Minority (-.44). (The Minority variable was not significant at a 95% confidence interval).

TABLE 5

REGRESSAND: GRADES IN ALL COURSES FOR ACTUARIAL SCIENCE MAJORS

Sample Mean = 2.79 S.D. = 1.04 N = 775

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	-.05	.31	-.02
	74	-.04	.30	-.02
	73	-.08	.30	-.03
	72	-.44	.31	-.14
	71	-.03	.31	-.01
GPA		1.02	.07	.59
AS		-.72	.26	-.31
HIST		-.60	.29	-.10
FI		-.50	.29	-.08
PSY		.42	.30	.07
Senior Course		.34	.17	.15
ENG		-.13	.26	-.03
IS		-.35	.31	-.06
SPCH		-.60	.53	-.04
POLS		-.18	.30	-.03
RE		.43	.47	.03
FED		-.78	.62	-.04
Minority		-.44	.27	-.05
EC		.19	.27	.05
Female		.03	.11	.01
Age		.01	.01	.05
MUS		-.38	.46	-.03
SAT--Math		.0007	.0006	.07
Hours Transferred		.001	.001	.04
INS		-.15	.29	-.03
Junior Course		.18	.16	.08
Missing Data--H.S. GPA		-.10	.11	-.05
Missing Data--SAT Math		.13	.15	.06
MK		-.05	.28	-.01
PHYS		-.11	.36	-.01
Veteran		-.10	.20	-.02
MGT		-.01	.31	-.001
GEOL		-.07	.41	-.006
Freshman Course		.07	.15	.02
PHIL		.20	.39	.02
AC		.14	.27	.03
BED		.36	.84	.01
MATH		.10	.26	.03
SAT-Verbal		-.0002	.0006	-.01
CHEM		.15	.41	.01
Hours Attempted		-.0002	.0008	-.01
DM		.10	.32	.01
SOC		.06	.30	.01
High School--GPA		-.01	.05	-.005
GEOG		.06	.41	.005
BL		.03	.31	.005
Constant		-.51		

R^2 = .45

R^2(Adjusted) = .41

Standard Error of Estimate = .79

Number of Majors = 37

HEGIS Code: 0599

AN ANALYSIS OF TABLE 6, ECONOMICS MAJORS

The adjusted R^2 was .31. The highlights may be summarized as follows:

* There was a slight grade inflation from 1971 to 1972, as the estimator dropped from -.28 to -.12. The estimator reflected a stable trend from 1972 to 1973, but there was again an upward trend from 1973 to 1974 (-.12 to .03). The period from 1974 to 1975 was rather stable but slightly deflationary. The overall effect between 1971 and 1975 has been a .27 increase in a letter grade.

* Economics majors on the average have done better in the following course areas: EC (.32); MGT (.53); ECI (1.78); and SOC (.22).

* On the average, Economics majors have performed worse in the following course areas: AC (-.22); BIO (-.46); PHYS (-.46); MATH (-.18); AS (-.78); and FR (-.28).

* Other variables having notable effect on Economics majors were: Transfer-GPA Indicator (-.30); Freshman Course (.14); and Junior Course (.15).

TABLE 6

REGRESSAND: GRADES IN ALL COURSES FOR ECONOMICS MAJORS

Sample Mean = 2.67 S.D. = 1.04 N = 3327

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	-.004	.11	-.002
	74	.03	.11	.01
	73	-.12	.11	-.04
	72	-.12	.11	-.04
	71	-.28	.11	-.07
GPA		.93	.03	.51
EC		.32	.07	.13
MGT		.53	.10	.09
AC		-.22	.09	-.05
Junior Course		.15	.05	.06
BIO		-.46	.15	-.05
PHYS		-.46	.16	-.04
Hours Transferred		-.0001	.001	-.01
MATH		-.18	.08	-.04
AS		-.78	.36	-.03
FR		-.28	.13	-.03
IS		-.15	.12	-.02
FI		-.16	.13	-.02
JOUR		-.50	.29	-.02
SPAN		-.17	.10	-.03
ECI		1.78	.87	.03
SPCH		.32	.19	.02
GER		-.27	.17	-.02
SOC		.22	.11	.03
Transfer-GPA Indicator		-.03	.02	-.04
PSY		.20	.11	.03
MUS		.18	.13	.02
HIST		-.10	.09	-.02
Freshman Course		.14	.07	.06
GEOL		-.14	.15	-.01
GEOG		-.11	.14	-.01
Hours Attempted		.001	.0004	.02
Sophomore Course		.06	.06	.03
PHIL		-.03	.13	-.004
Age		-.002	.003	-.01
Missing Data--H.S. GPA		.05	.05	.02
SAT--Math		.0003	.0003	.02
RE		.15	.13	.02
BL		.14	.12	.02
FED		.39	.50	.01
DM		.08	.08	.02
MK		.10	.12	.01
Female		.04	.05	.01
High School--GPA		-.02	.03	-.01
Missing Data--Age		.06	.10	.01
ENG		.04	.07	.01
HPRS		.42	.86	.01
Minority		-.02	.05	-.01
CJ		.10	.26	.01
Veteran		.01	.04	.01
SAT--Verbal		-.0001	.0003	-.005
CHEM		-.04	.16	-.004
Missing Data--SAT Verbal		.01	.05	-.01
INS		.02	.19	.002
Constant		.07		

R^2 = .32

R^2(Adjusted) = .31

Standard Error of Estimate = .86

Number of Majors = 82

HEGIS Code: 0517

AN ANALYSIS OF TABLE 7, FINANCE MAJORS

The adjusted R^2 was .41. The highlights may be summarized as follows:

- The estimator increased from -.07 in 1971 to .18 in 1972 or .25 of a letter grade. Although the period from 1971 to 1972 represents the largest increase in the estimator, an upward trend continued through 1975. This upward grading trend from 1971 to 1975 has resulted in an increase of .57 of a letter grade.

- The one statistically significant course area that Finance majors tended on the average to perform better in was BED (.45).

- On the average, Finance majors performed worse in the following course areas: AC (-.34); IS (-.38); HIST (-.40); PHYS (-.76); and AS (-.51).

- No other variables had any significant impact on Finance majors.

TABLE 7

REGRESSAND: GRADES IN ALL COURSES FOR FINANCE MAJORS

Sample Mean = 2.67 S.D. = 1.02 N = 3020

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.50	.12	.23
	74	.30	.11	.14
	73	.22	.11	.08
	72	.18	.12	.06
	71	-.07	.12	-.02
GPA		.96	.03	.59
Hours Attempted		.001	.0004	.06
AC		-.34	.12	-.09
IS		-.38	.12	-.08
Freshman Course		-.10	.07	-.04
MGT		.22	.12	.05
HIST		-.40	.14	-.06
BED		.45	.18	.04
BL		.19	.13	.04
EC		.11	.11	.03
Transfer-GPA Indicator		-.03	.02	-.04
PHYS		-.76	.27	-.04
Missing Data--SAT Math		.07	.04	.04
AS		-.51	.24	-.03
ENG		-.15	.11	-.04
RE		.08	.13	.02
BIO		-.33	.22	-.02
ART		.20	.26	.01
GEOG		.14	.17	.01
MUS		.40	.37	.02
INS		.06	.14	.01
Hours Transferred		-.001	.001	-.03
Missing Data--H.S. GPA		.06	.05	.02
JOUR		-.51	.40	-.02
POLS		-.15	.14	-.02
Female		.06	.05	.02
SAT--Math		.0004	.0003	.03
FR		.45	.47	.01
PSY		.06	.15	.01
SPCH		.18	.30	.01
HPRS		.52	.79	.01
GEOL		-.12	.17	-.01
High School--GPA		-.01	.02	.01
CHEM		.08	.21	.01
Minority		.04	.06	.01
SAT--Verbal		-.0002	.0003	-.01
Missing Data--Age		-.04	.08	-.01
FED		.25	.79	.004
SOC		-.01	.15	-.001
PHIL		-.11	.23	-.01
MATH		-.01	.17	-.001
MK		-.04	.13	-.01
Age		-.001	.004	-.004
Senior Course		.02	.06	.01
FI		-.07	.11	-.03
DM		-.06	.11	-.02
SPAN		-.11	.41	-.004
GER		-.08	.37	-.003
Junior Course		.01	.05	.004
Veteran		.01	.04	.002
Constant		-.35		

R^2 = .42

R^2(Adjusted) = .41

Standard Error of Estimate = .78

Number of Majors = 148

HEGIS Code: 0504

AN ANALYSIS OF TABLE 8, INSURANCE AND RISK MAJORS

The adjusted R^2 was .36. The highlights may be summarized as follows:

- There existed an upward grading trend from 1971 to 1975 of about 42% per year. This upward trend is equivalent to an increase of .32 of a letter grade during the period from 1971 to 1975.

- On the average, Insurance and Risk majors performed better in the following course areas: INS (.92); BED (1.23); MGT (.77); MUS (1.87); BL (.67); EC (.49); and PSY (.63).

- Insurance and Risk majors performed significantly worse on the average in BIO (-.90).

- High School--GPA (-.11) and Missing Data--Age (-.11) had a negative impact on Insurance and Risk majors but neither was statistically significant.

TABLE 8

REGRESSAND: GRADES IN ALL COURSES FOR INSURANCE AND RISK MAJORS

Sample Mean = 2.57 S.D. = .99 N = 1111

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.20	.27	.09
	74	.15	.27	.07
	73	-.02	.27	-.01
	72	-.08	.27	-.02
	71	-.12	.28	-.03
GPA		1.00	.06	.48
INS		.92	.24	.36
BED		1.23	.28	.17
BIO		-.90	.34	-.08
AC		.004	.24	.001
HIST		-.37	.25	-.07
Hours Transferred		-.001	.001	-.03
MGT		.77	.25	.17
MUS		1.87	.51	.10
BL		.67	.25	.13
AS		-.56	.46	-.03
POLS		-.14	.25	-.02
DM		.17	.23	.06
Freshman Course		.30	.13	.12
EC		.49	.24	.12
PSY		.63	.28	.09
Hours Transferred		.002	.001	.07
High School--GPA		-.11	.09	-.04
RE		.45	.26	.08
PHYS		-.12	.37	-.01
Missing Data--Age		-.11	.18	-.02
FR		-.17	.45	-.01
FED		-.51	.83	-.02
SAT--Verbal		.0004	.001	.02
Veteran		.05	.07	.02
SOC		.39	.27	.06
MATH		.38	.27	.05
MK		.35	.25	.07
GEOG		.33	.27	.05
SPCH		-.03	.45	-.002
Transfer-GPA Indicator		-.02	.03	-.03
Minority		-.07	.10	-.02
Missing Data--H.S. GPA		.06	.11	.02
Age		-.004	.005	-.03
IS		.30	.26	.06
CJ		.46	.51	.02
CHEM		.31	.33	.03
Sophomore Course		.04	.11	.02
JOUR		.41	.51	.02
ECI		.56	.83	.02
FI		.24	.26	.04
GEOL		.28	.32	.03
ENG		.20	.23	.05
SPAN		.28	.51	.01
PHIL		.14	.35	.01
Senior Course		-.03	.09	-.01
Female		-.02	.08	-.01
Missing Data--SAT Verbal		.02	.09	.01
SAT--Math		-.0001	.001	-.004
Constant		-.42		

R^2 = .39

R^2(Adjusted) = .36

Standard Error of Estimate = .79

Number of Majors = 51

HEGIS Code: 0512

AN ANALYSIS OF TABLE 9, MANAGEMENT MAJORS

The adjusted R^2 was .35. The highlights may be summarized as follows:

- The grading trend between 1971 and 1972 was stable, but a slight upward trend was observed from 1972 to 1975. The total effect from 1971 to 1975 was an increase in the estimator of 178% or .25 of a letter grade.
- On the average, Management majors tend to perform better in HIST (.24); and ECI (.76).
- Management majors tend to perform worse in the following course areas: AC (-.66); IS (-.71); HIST (-.69); DM (-.47); BIO (-.90); FI (-.58); PHYS (-.71); PHIL (-.54); and NURS (-1.26).
- Junior Course (.06) and Hours Attempted (.0004) affected Management majors positively, while Transfer--GPA Indicator had a negative impact (-.02).

TABLE 9

REGRESSAND: GRADES IN ALL COURSES FOR MANAGEMENT MAJORS

Sample Mean = 2.55 S.D. = 1.02 N = 15682

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.39	.06	.18
74	.30	.06	.14
73	.24	.09	.06
72	.14	.05	.06
71	.14	.06	.04
GPA	.93	.01	.49
MGT	.08	.06	.03
AC	-.66	.06	-.17
IS	-.71	.06	-.15
BED	.24	.08	.03
HIST	-.69	.07	-.11
DM	-.47	.06	-.16
Hours Transferred	-.001	.0003	-.04
BIO	-.90	.10	-.07
FI	-.58	.07	-.10
Junior Course	.06	.03	.03
EC	-.13	.06	-.03
BL	-.10	.06	-.02
Missing Data--SAT Verbal	.06	.16	.03
ECI	.76	.30	.02
PHYS	-.71	.12	-.04
SPCH	.08	.12	.005
Hours Attempted	.0004	.0002	.02
PHIL	-.54	.10	-.04
SAT--Math	.0003	.0001	.02
POLS	-.42	.07	-.06
ENG	-.35	.06	-.08
GEOL	-.47	.08	-.05
INS	-.35	.07	-.06
MUS	.01	.12	.001
Transfer--GPA Indicator	-.02	.01	-.02
PED	.13	.21	.004
UL	.31	.32	.01
NURS	-1.26	.59	-.01
Minority	-.04	.03	-.01
AS	-.79	.37	-.01
MK	-.28	.06	-.06
SOC	-.27	.07	-.04
GEOG	-.31	.08	-.03
Female	.03	.02	.01
JOUR	-.41	.17	-.02
RE	-.23	.07	-.04
PSY	-.23	.07	-.03
CJ	-.36	.14	-.02
MATH	-.23	.09	-.02
CHEM	-.39	.17	-.02
ART	-.22	.17	-.01
Missing Data--H.S. GPA	.03	.02	.01
FR	-.27	.24	-.01
HPRS	.21	.37	.003
Sophomore Course	-.01	.03	-.003
SPAN	-.14	.25	-.003
Age	.001	.001	.005
Veteran	-.01	.02	-.004
GER	-.10	.28	-.002
Missing Data--Age	.01	.04	.002
High School--GPA	-.003	.02	-.001
Freshman Course	.01	.04	.003
Missing Data--SAT Math	-.02	.16	-.01
Constant	-.01		

$R^2 = .35$

R^2(Adjusted) = .35

Standard Error of Estimate = .82

Number of Majors = 770

HEGIS Code: 0506

AN ANALYSIS OF TABLE 10, MARKETING MAJORS

The adjusted R^2 was .31. The highlights can be summarized as follows:

- There was a continued upward grading trend from 1971 to 1975. The average increase in the estimator was 63%, with the largest increase in the estimator having occurred between 1972 and 1973. The resulting effect over the period from 1971 to 1975 can be interpreted as an increase of .25 of a letter grade.
- On the average, Marketing majors performed better in the following course areas: BED (.31); MUS (.21); UL (.55); HPRS (.66). (Only BED was statistically significant).
- Marketing majors on the average performed worse in the following course areas: AC (-.59); HIST (-.76); BIO (-.80); MATH (-.56); and IS (-.57).
- The Transfer-GPA Indicator had a negative weight (-.04), while the variable Junior Course had a positive weight (.17).

TABLE 10

REGRESSAND: GRADES IN ALL COURSES FOR MARKETING MAJORS

Sample Mean = 2.49 S.D. = 1.00 N = 6794

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.35	.09	.17
74	.31	.08	.14
73	.27	.08	.10
72	.13	.09	.04
71	.10	.09	.02
GPA	.93	.02	.48
AC	-.59	.08	-.16
HIST	-.76	.09	-.13
MK	-.06	.08	-.03
MGT	-.01	.09	-.003
BED	.31	.11	.04
Transferred-GPA Indicator	-.04	.01	-.05
BL	-.14	.09	-.03
BIO	-.80	.14	-.07
MUS	.21	.15	.02
EC	-.14	.09	-.03
RE	-.22	.09	-.04
MATH	-.56	.12	-.06
UL	.55	.33	.02
IS	-.57	.09	-.11
Junior Course	.17	.05	.08
FI	-.57	.10	-.10
DM	-.39	.08	-.13
POLS	-.39	.10	-.06
PHIL	-.55	.15	-.04
Hours Attempted	.0004	.0003	.02
SPCH	.13	.16	.01
ECI	-2.22	.84	-.03
HPRS	.66	.42	.02
INS	-.36	.10	-.06
Senior Course	.09	.06	.04
GEOL	-.37	.11	-.04
ENG	-.24	.08	-.06
GEOG	-.31	.11	-.04
Missing Data--SAT Math	.08	.23	.04
CHEM	-.32	.14	-.03
FED	.27	.33	.01
High School--GPA	.02	.03	.01
Hours Transferred	-.0004	.0004	-.02
Missing Data--Age	.09	.07	.02
CJ	-.39	.25	-.02
Minority	-.04	.04	-.01
PHYS	-.31	.21	-.02
SAT--Math	.0002	.0002	.01
SAT--Verbal	-.0002	.0002	-.01
Female	.03	.03	.01
GER	-.51	.49	-.01
SOC	-.16	.10	-.03
PSY	-.16	.10	-.02
ART	-.23	.21	-.01
AS	-.52	.60	-.01
JOUR	-.13	.14	-.01
FR	-.15	.25	-.01
Age	-.002	.003	-.01
Missing Data--H.S. GPA	.02	.04	.01
Veteran	.01	.03	.004
SPAN	-.09	.30	-.003
Missing Data--SAT Verbal	-.04	.23	-.02
Sophomore Course	.007	.05	.003
Constant	.06		

R^2 = .32

R^2(Adjusted) = .31

Standard Error of Estimate = .83

Number of Majors = 315

HEGIS Code: 0509

AN ANALYSIS OF TABLE 11, REAL ESTATE MAJORS

The adjusted R^2 was .30. The highlights may be summarized as follows:

- * A slight downward trend occurred between 1971 and 1972, as the estimator dropped from .06 to .003, but since 1972 there has been a slight upward grading trend. The results of this slight upward trend from 1972 to 1975 was an increase of .22 of a letter grade.
- * Real Estate majors on the average have done better in the following course areas: RE (.12); BL (.10); HPRS (.77); and PHYS (.43). (None of these positive weights are statistically significant.)
- * On the average, Real Estate majors have done worse in the following course areas: HIST (-.68); AC (-.44); FI (-.52); IS (-.52); DM (-.37); POLS (-.47); BIO (-.59); and PHIL (-.65).
- * Transfer-GPA Indicator (-.04) had a negative impact on Real Estate majors.

TABLE 11

REGRESSAND: GRADES IN ALL COURSES FOR REAL ESTATE MAJORS

Sample Mean = 2.46 S.D. = 1.05 N = 2916

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.28	.13	.12
74	.21	.12	.09
73	.10	.12	.04
72	.003	.12	.001
71	.06	.13	.02
GPA	.99	.04	.50
RE	.12	.18	.05
BL	.10	.19	.02
MGT	.06	.19	.01
EC	-.08	.19	-.02
HIST	-.68	.21	-.10
MK	-.12	.19	-.02
Transfer-GPA Indicator	-.04	.02	-.05
AC	-.44	.19	-.11
FI	-.52	.19	-.10
IS	-.52	.19	-.10
Junior Course	.08	.07	.03
IM	-.37	.18	-.12
POLS	-.47	.21	-.06
BIO	-.59	.26	-.05
PHIL	-.65	.29	-.04
Minority	.13	.08	.03
MATH	-.46	.25	-.04
CJ	-.51	.30	-.03
Veteran	-.06	.05	-.03
FR	-.79	.54	-.02
HPRS	.77	.90	.01
Missing Data--Age	.11	.11	.02
PHYS	.43	.65	.01
UL	.29	.48	.01
HED	-.03	.23	-.003
ECI	.26	.55	.01
Senior Course	-.07	.08	-.03
Missing Data--H.S. GPA	.06	.06	.02
GEOL	-.32	.22	-.04
INS	-.25	.20	-.04
GEOG	-.31	.23	-.03
SOC	-.24	.21	-.03
Hours Attempted	.0002	.0005	.01
ENG	-.18	.19	-.04
PSY	-.15	.21	-.02
SPCH	-.25	.43	-.01
Missing Data--SAT Math	-.03	.05	-.02
Age	.002	.004	.01
SAT--Verbal	.0002	.0003	.01
CHEM	-.15	.33	-.01
Freshman Course	.02	.08	.01
Female	-.02	.06	-.01
Hours Transferred	-.0002	.001	-.01
High School--GPA	.01	.04	.01
SAT--Math	-.0001	.0003	-.01
JOUR	-.18	.54	-.01
ART	-.10	.33	-.01
Constant	-.10		

$R^2 = .31$

R^2(Adjusted) = .30

Standard Error of Estimate = .88

Number of Majors = 129

HEGIS Code: 0511

AN ANALYSIS OF TABLE 12, COMMUNICATIONS MAJORS

The adjusted R^2 was .38. The highlights may be summarized as follows:

- * There has been a continued upward grading trend from 1971 to 1975. The estimator has increased from -.06 in 1971 to .39 in 1975. This represents an increase of .45 of a letter grade.
- * On the average, Communication majors performed better in the following course areas: SPCH (.36); and FED (1.29).
- * Communication majors performed worse on the average in the following course areas: DM (-1.30); HIST (-.32); BIO (-.65); IS (-.89); CHEM (-.75); and PHIL (-.34).
- * Hours Attempted (.001) had a positive impact on Communications majors.

TABLE 12

REGRESSAND: GRADES IN ALL COURSES FOR COMMUNICATIONS MAJORS

Sample Mean = 2.57 S.D. = .99 N = 1750

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.39	.15	.19
74	.32	.15	.14
73	.22	.15	.08
72	.03	.15	.01
71	-.06	.15	.02
GPA	1.02	.05	.56
DM	-1.30	.29	-.09
HIST	-.32	.09	-.09
BIO	-.65	.16	-.09
SPCH	.36	.12	.07
Hours Attempted	.001	.0006	.05
ENG	.12	.09	.04
MUS	.26	.16	.03
FED	1.29	.57	.04
Missing Data--SAT Verbal	.06	.06	.03
Freshman Course	-.10	.07	-.05
IS	-.89	.36	-.05
HPRS	.84	.47	.03
ART	.06	.10	.01
PSY	.02	.11	.004
Transfer-GPA Indicator	-.02	.03	-.02
CHEM	-.75	.37	-.04
PHIL	-.34	.15	-.05
Missing Data--Age	.14	.10	.03
BED	.23	.27	.02
GEOL	-.34	.17	-.04
JOUR	-.18	.08	-.06
EC	-.23	.10	-.05
GEOG	-.22	.10	-.05
POLS	-.16	.10	-.04
CJ	-.25	.17	-.03
MATH	-.16	.12	-.03
FR	-.33	.41	-.02
AC	-.24	.30	-.02
SPE	-.32	.47	-.01
Senior Course	-.04	.06	-.02
Minority	-.03	.06	-.01
FI	-.45	.80	-.01
Hours Transferred	-.0005	.0008	-.02
Age	.004	.008	.01
RE	-.24	.47	-.01
BL	-.11	.20	-.01
SOC	-.06	.10	-.01
MK	-.09	.16	-.01
PHYS	-.12	.37	-.006
Female	-.01	.04	-.007
INS	-.09	.36	-.005
GER	.07	.41	.004
High School--GPA	-.01	.07	-.003
SPAN	-.03	.19	-.003
SAT--Verbal	-.00004	.0003	-.003
Veteran	-.007	.06	-.003
Missing Data--H.S. GPA	-.009	.08	-.004
Sophomore Course	-.007	.07	-.003
Constant	-.31		

R^2 = .38

R^2(Adjusted) = .36

Standard Error of Estimate = .80

Number of Majors = 84

HEGIS Code: 0601

AN ANALYSIS OF TABLE 13, JOURNALISM MAJORS

The adjusted R^2 was .41. The highlights may be summarized as follows:

- A brief downward trend was observed between 1971 and 1972, as the estimator decreased from -.04 to -.10, but from 1972 to 1975 an upward grading trend existed. The overall effect was a letter grade inflated by .15 between 1971 and 1975.
- On the average, Journalism majors performed better in the following course areas: ENG (.14); MUS (.27); SPCH (.38); HPRS (.89); ECI (.91); and FED (.46).
- Journalism majors performed worse in the following course areas on the average: BIO (-.77); HIST (-.38); FED (-.47); DM (-.52); AC (-.48); GER (-.38); RE (-.47); and CHEM (-.34).
- The variables Sophomore Course (-.13) and Transfer-GPA Indicator (-.02) impacts were negative, while Missing Data--SAT Verbal (-.07) had a positive impact.

TABLE 13

REGRESSAND: GRADES IN ALL COURSES FOR JOURNALISM MAJORS

Sample Mean = 2.65 S.D. = 1.00 N = 5789

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.11	.08	.05
	74	.07	.08	.03
	73	-.02	.08	-.01
	72	-.10	.08	-.03
	71	-.04	.08	-.01
GPA		.97	.02	.59
BIO		-.77	.09	-.10
HIST		-.38	.06	-.10
ENG		.14	.05	.05
MUS		.27	.08	.04
SPCH		.38	.10	.04
Freshman Course		-.06	.04	-.03
Sophomore Course		-.13	.04	-.05
HPRS		.89	.22	.04
ECI		.91	.22	.04
SOC		.11	.07	.02
SPAN		.004	.06	.001
FED		.46	.17	.03
ART		-.47	.10	-.05
BED		.27	.14	.02
PSY		.04	.08	.01
Missing Data--SAT Verbal		.07	.03	.03
DM		-.52	.13	-.04
Transfer-GPA Indicator		-.02	.01	-.02
GEOL		-.36	.-8	-.05
MGT		.21	.14	.02
AC		-.48	.15	-.03
GER		-.38	.10	-.04
MATH		-.27	.07	-.06
MK		-.005	.08	-.001
Hours Attempted		.0004	.0003	.02
RE		-.47	.23	-.02
GEOG		-.22	.08	-.04
CHEM		-.34	.16	-.02
POLS		-.18	.07	-.04
PHYS		-.57	.35	-.02
FR		-.15	.07	-.03
JOUR		-.12	.05	-.05
PHIL		-.14	.08	-.02
CJ		-.22	.16	-.02
Veteran		-.03	.04	-.01
High School--GPA		-.02	.03	-.01
EC		-.11	.11	-.01
Missing Data--Age		.07	.07	.01
Minority		-.03	.03	-.01
Female		.02	.02	.01
IS		-.20	.30	-.01
INS		-.20	.35	-.01
SAT--Math		.0002	.0002	.01
SAT--Verbal		-.0002	.0002	-.01
BL		-.06	.16	-.004
Junior Course		.01	.04	-.01
Hours Transferred		-.0001	.0004	-.01
FI		.19	.77	.003
Age		.0004	.002	.002
Constant		.19		

$R^2 = .42$

R^2(Adjusted) = .41

Standard Error of Estimate = .77

Number of Majors = 280

HEGIS Code: 0602

AN ANALYSIS OF TABLE 14, INFORMATION SYSTEMS MAJORS

The adjusted R^2 was .82. The highlights may be summarized as follows:

- From 1971 to 1972 there was a 33% decrease in the estimator or .12 of a letter grade deflation. However, the following year (1973), the estimator reversed itself, which accounted for .34 of a letter grade inflation. On the other hand, from 1973 to 1975 the grading trend has been rather stable, with the total effect between 1971 and 1975 being an increase of .26 of a letter grade.

- On the average, Information Systems majors perform better in the following course areas: BL (.83); and IS (.60).

- Information Systems majors perform worse in the following course areas: MATH (-.77); AC (-.68); GER (-2.97); and HIST (-.75).

- The variables Sophomore Course (.68) and Freshman Course (.52) both weighted positively on Information System majors.

TABLE 14

REGRESSAND: GRADES IN ALL COURSES FOR INFORMATION SYSTEMS MAJORS

Sample Mean = 2.63 S.D. = 1.04 N = 459

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	-.07	.40	-.04
	74	-.09	.39	-.04
	73	-.10	.39	-.03
	72	-.45	.39	-.12
	71	-.33	.39	-.09
GPA		1.06	.15	.55
MATH		-.77	.30	-.23
AC		-.68	.32	-.19
GER		-2.97	.88	-.13
HIST		-.75	.35	-.13
BL		.83	.37	.14
Sophomore Course		.68	.18	.31
IS		.60	.32	.19
Transfer-GPA Indicator		-.09	.06	-.11
Missing Data--H.S. GPA		-.16	.42	-.07
PHIL		-.68	.44	-.07
ART		-1.58	.88	-.07
Freshman Courses		.52	.22	.22
FR		-.96	.48	-.10
ENG		-.42	.30	-.12
SOC		-.43	.37	-.07
EC		-.25	.32	-.06
BIO		-.57	.51	-.05
FI		.44	.37	.08
INS		.56	.40	.08
MGT		.38	.35	.08
RE		.36	.39	.06
DM		.12	.31	.33
Hours Transferred		-.002	.002	-.06
MK		.20	.38	.03
SAT--Math		.0002	.001	.009
MUS		.14	.47	.01
POLS		-.05	.35	-.009
Junior Courses		-.11	.18	-.05
CJ		.26	.88	.01
SPCH		.15	.88	.007
Minority		-.02	.18	-.006
PHYS		-.45	.50	-.04
SAT--Verbal		-.001	.001	-.06
GEOL		-.36	.40	-.05
GEOG		-.36	.40	-.05
JOUR		.59	.89	-.03
BED		-.40	.56	-.03
PSY		-.23	.40	-.03
High School--GPA		.30	.38	.14
Female		-.39	.54	-.08
Age		.008	.02	.03
Missing Data--SAT Verbal		.02	.14	.01
Missing Data--Age		.07	.36	.01
Veteran		-.03	.19	-.01
Constant		-.60		

R^2 = .44

R (Adjusted) = .37

Standard Error of Estimate = .82

Number of Majors = 25

HEGIS Code: 0701

AN ANALYSIS OF TABLE 15, ART EDUCATION MAJORS

The adjusted R^2 was .39. The highlights may be summarized as follows:

- There was a strong upward grading trend from 1971 to 1973, as the estimator increased from .04 to .79 or the equivalent of .75 of a letter grade. The estimator decreased in 1974, (from .79 to .56) but regained it's upward momentum in 1975 (.89). The final results in this overall strong upward trend was a .85 increase in a letter grade.

- Art Education majors on the average performed better in the following course areas: FED (.61); SPCH (.88); and MUS (.45). (None of the above course areas were statistically significant at the 95% confidence interval).

- On the average, Art Education majors performed worse in the following course areas: HIST (-.31); BIO (-.84); and JOUR (-1.57). (None of the above course areas were statistically significant at the 95% confidence interval).

- Missing Data--SAT Math (.46), Hours Attempted (.002), and SAT--Math (.002) had a positive weight on Art Education majors, while Age (-.003) had a negative weight. The negative impact of Age indicates that older students tend not to do as well in Art Education as younger students.

TABLE 15

REGRESSAND: GRADES IN ALL COURSES FOR ART EDUCATION MAJORS

Sample Mean = 2.72 S.D. = .93 N = 355

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.89	.30	.47
	74	.56	.29	.29
	73	.79	.30	.31
	72	.39	.31	.11
	71	.04	.35	.01
GPA		.80	.15	.46
HIST		-.31	.31	-.09
BIO		-.84	.44	-.11
Missing Data--SAT Math		.46	.21	.24
Hours Attempted		.001	.001	.08
JOUR		-1.57	.81	-.29
Age		-.03	.01	-.18
GEOL		.71	.42	.10
GEOG		-.28	.39	-.04
FED		.61	.38	.10
FR		-.60	.59	-.05
POLS		-.06	.35	-.01
SPCH		.88	.59	.07
Female		.25	.13	.11
SAT--Math		.002	.001	.12
Missing Data--Age		-.28	.34	-.06
SOC		-.75	.83	-.04
PHIL		-.07	.40	-.01
MUS		.45	.35	.09
ART		.27	.28	.15
Sophomore Course		.20	.25	.06
PSY		-.14	.51	-.02
JR		-.07	.14	-.03
SAT--Verbal		-.001	.001	-.04
Missing Data--H.S. GPA		-.10	.22	-.05
CHEM		-.18	.80	0.01
High School--GPA		.08	.25	.03
SPAN		-.03	.61	-.003
Minority		-.05	.29	-.02
Freshman Course		-.03	.14	-.02
MATH		.16	.37	.03
ENG		.12	.32	.04
Transfer-GPA Indicator		.01	.07	.01
Constant		-.83		

R^2 = .45

R^2(Adjusted) = .39

Standard Error of Estimate = .73

Number of Majors = 21

HEGIS Code: 0831

AN ANALYSIS OF TABLE 16, BUSINESS EDUCATION MAJORS

The adjusted R^2 was .39. The highlights may be summarized as follows:

- There was an increase in the estimator from -.12 to .01 during the period between 1971 and 1972. A stable grading trend existed from 1972 to 1974, but an upward trend was again observed between 1974 and 1975, which contributed to a total increase in a letter grade of .26 between 1971 and 1975.

- On the average, Business Education majors did better in the following course areas: FED (.23); MUS (.23); and SPAN (.67). (None of the above course areas were statistically significant).

- Business Education majors on the average performed worse in the following course areas: AC (-.98); HIST (-.95); DM (-1.02); BIO (-1.16); POLS (-.80): GEOL (-.79); CHEM (-1.66); MATH (-.65); ENG (-.50); and IS (-.61).

- Hours Transferred (-.002) had a negative impact and Missing Data--Age (.44) a positive impact.

TABLE 16

REGRESSAND: GRADES IN ALL COURSES FOR BUSINESS EDUCATION MAJORS

Sample Mean = 2.67 S.D. = 1.07 N = 2065

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.14	.15	.06
	74	.01	.15	.006
	73	.04	.15	.02
	72	.01	.15	.003
	71	-.12	.16	-.03
GPA		.83	.04	.43
BED		-.002	.12	-.0007
FED		.23	.14	.05
BCI		.17	.15	.03
AC		-.98	.14	-.23
HIST		-.95	.14	-.21
MUS		.23	.19	.03
DM		-1.02	.18	-.12
Hours Transferred		-.002	.001	-.06
Freshman Course		.04	.12	.02
SPCH		.04	.23	.004
BIO		-1.16	.23	-.10
Missing Data--Age		.44	.17	.05
SPAN		.67	.49	.02
Senior Course		.13	.10	.05
SAT--Math		.0006	.0004	.04
POLS		-.80	.17	-.12
GEOL		-.79	.17	-.12
MATH		-.65	.15	-.13
CHEM		-1.66	.61	-.05
ENG		-.50	.13	-.13
GEOG		-.67	.22	-.06
SOC		-.58	.17	-.08
IS		-.61	.21	-.06
NURS		-.76	.40	-.03
Transfer-GPA Indicator		-.02	.02	-.02
Minority		-.04	.05	-.02
FI		-.66	.50	-.02
FR		.19	.61	.006
EC		-.37	.14	-.08
Sophomore Course		.05	.10	.02
PSY		-.40	.17	-.05
PHIL		-.42	.22	-.04
RE		-.36	.18	-.05
MGT		-.31	.16	-.05
BL		-.32	.17	-.05
INS		-.39	.25	-.03
MK		-.27	.17	-.04
Hours Attempted		-.0003	.001	-.01
Veteran		.05	.07	.01
HPRS		-.17	.30	-.01
ART		-.32	.60	-.01
PHYS		-.30	.60	-.01
High School--GPA		.03	.06	.01
SPE		.21	.84	.004
SAT--Verbal		-.0001	.0004	-.006
Constant		.53		

R^2 = .41

R^2(Adjusted) = .39

Standard Error of Estimate = .83

Number of Majors = 98

HEGIS Code: 0838

AN ANALYSIS OF TABLE 17, EARLY CHILDHOOD EDUCATION MAJORS

The adjusted R^2 was .45. The highlights may be summarized as follows:

- There was a slight downward trend between 1971 and 1972. The trend from 1972 to 1975 was upward. The total change from 1971 to 1975 was .35 of a letter grade.
- Early Childhood Education majors on the average performed better in the following course areas: FED (.14); and ECI (.21).
- On the average, Early Childhood Education majors did worse in the following course areas: BIO (-1.02); HIST (-.69); GEOL (-.81); PSY (-.48); SOC (-.47); ENG (-.43); POLS (-.64); CHEM (-.73); and RE (-1.63).
- Freshman Course (-.16) and Hours Transferred (-.003) had a negative impact, while Senior Course (.10) had a positive impact.

TABLE 17

REGRESSAND: GRADES IN ALL COURSES FOR EARLY CHILDHOOD EDUCATION MAJORS

Sample Mean = 3.07 S.D. = 1.01 N = 2928

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	-.09	.15	-.04
	74	-.13	.15	-.06
	73	-.35	.15	-.13
	72	-.48	.15	-.13
	71	-.44	.16	-.10
GPA		.93	.03	.51
Freshman Course		-.16	.06	-.07
BIO		-1.02	.11	-.14
Hours Transferred		-.003	.001	-.13
Sophomore Course		-.001	.05	-.0003
FED		.14	.07	.03
HIST		-.69	.08	-.16
GEOL		-.81	.11	-.12
PSY		-.48	.07	-.10
SOC		-.47	.08	-.09
ENG		-.43	.06	-.12
POLS		-.64	.10	-.10
ECI		.21	.07	.04
GEOG		-.60	.13	-.07
MATH		-.35	.09	-.07
PHIL		-.55	.16	-.05
CHEM		-.73	.24	-.04
EC		-.64	.23	-.04
RE		-1.63	.75	-.03
ART		-.13	.07	-.03
JOUR		-.87	.38	-.03
SPE		-.43	.18	-.03
PHYS		-.53	.24	-.03
GER		-.81	.38	-.03
SAT--Verbal		.001	.0003	.04
FR		-.56	.27	-.03
CJ		-.71	.38	-.03
DM		-.90	.54	-.02
BED		-.43	.24	-.02
Senior Course		.10	.04	.04
Hours Attempted		-.001	.0004	-.04
Transfer-GPA Indicator		-.02	.02	-.04
AC		-.43	.29	-.02
MUS		.10	.07	.02
PHRS		.09	.07	.02
MGT		-.64	.53	-.02
Female		-.09	.07	-.02
SAT--Math		-.0003	.0003	-.02
MK		-.63	.75	-.01
Minority		-.04	.05	-.01
Missing Data--Age		.06	.10	.01
Age		.001	.003	.01
SPCH		-.06	.12	-.01
SPAN		.11	.31	.01
Missing Data--SAT Math		.10	.23	.05
Missing Data--SAT Verbal		-.09	.22	-.04
Veteran		.02	.09	.003
High School--GPA		-.01	.03	-.004
Missing Data--H.S. GPA		-.01	.05	-.003
Constant		.86		

R^2 = .46

R^2(Adjusted) = .45

Standard Error of Estimate = .75

Number of Majors = 146

HEGIS Code: 0802

AN ANALYSIS OF TABLE 18, ELEMENTARY EDUCATION MAJORS

The adjusted R^2 was .46. The highlights may be summarized as follows:

- There was a slight dip in the estimators between 1971 and 1972, but from 1972 to 1975 an upward grading trend was observed. This upward trend resulted in a .19 of a letter grade increase from 1971 to 1975.

- On the average, Elementary Education majors did better in the following course areas: ECI (.35); MUS (.39); FED (.18); BED (.31); HPRS (.26); and ART (.14).

- Elementary Education majors performed worse in the following course areas: HIST (-.64); BIO (-.95); POLS (-.53); AC (-1.38); PHYS (-.52); MK (-1.32); and NURS (-2.21).

- When controlling for other factors, the following variables had a negative impact on Elementary Education majors: Freshman Course (-.23); Sophomore Course (-.11); Minority (-.09); Age (-.004); and Transfer-GPA Indicator (-.02).

TABLE 18

REGRESSAND: GRADES IN ALL COURSES FOR ELEMENTARY EDUCATION MAJORS

Sample Mean = 2.89 S.D. = 1.09 N = 6578

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.22	.09	.10
74	.19	.09	.08
73	.04	.09	.01
72	-.01	.09	-.003
71	.03	.09	.01
GPA	.90	.02	.49
Freshman Course	-.23	.05	-.10
Sophomore Course	-.11	.05	-.04
Hours Transferred	-.003	.0004	-.10
HIST	-.64	.06	-.14
ECI	.35	.04	.14
MUS	.39	.06	.08
BIO	-.95	.09	-.11
FED	.18	.05	.05
HPRS	.26	.06	.05
POLS	-.53	.07	-.08
ART	.14	.07	.02
SPCH	.12	.09	.01
Minority	-.09	.03	-.04
BED	.31	.14	.02
AC	-1.38	.36	-.03
PHYS	-.52	.12	-.04
SOC	-.33	.07	-.05
GEOG	-.30	.07	-.06
MATH	-.25	.05	-.07
MK	-1.32	.46	-.03
NURS	-2.21	.80	-.03
Age	-.004	.002	-.03
SPE	-.36	.12	-.03
GEOL	-.27	.08	-.04
Transfer-GPA Indicator	-.02	.01	-.03
EC	-.45	.15	-.03
JOUR	-.76	.33	-.02
CJ	-.56	.24	-.02
ENG	-.15	.06	-.04
UL	-.99	.57	-.02
High School--GPA	.04	.03	.01
PSY	-.13	.07	-.02
PHIL	-.22	.13	-.02
CHEM	-.25	.15	-.02
Veteran	-.06	.04	-.01
Junior Course	.04	.03	.02
SAT--Math	.0001	.0002	.01
IS	-.44	.57	-.01
RE	-.36	.46	-.01
GER	.29	.46	.01
FI	-.46	.80	-.01
MGT	-.22	.57	-.004
DM	-.13	.36	-.003
Hours Attempted	-.0001	.0003	-.003
SAT--Verbal	.0001	.0002	.003
Missing Data--Age	.01	.05	.001
FR	-.02	.12	-.001
SPAN	.01	.12	.001
Missing Data--SAT Math	.003	.03	.001
Constant	.37		

R^2 = .47

R^2(Adjusted) = .46

Standard Error of Estimate = .80

Number of Majors = 60

HEGIS Code: 0802

AN ANALYSIS OF TABLE 19, PHYSICAL EDUCATION MAJORS

The adjusted R^2 was .43. The highlights may be summarized as follows:

* A downward grading trend existed between 1971 and 1973; but the downward trend reversed itself from 1973 to 1975, as the estimator increased from -.30 to .17. Hence, in spite of the latest trend having an upward slope, the overall effect from 1971 to 1975 was a .03 decrease in a letter grade.

* On the average, Physical Education majors did better in the following course areas: HPRS (.35); and SPCH (.45).

* Physical Education majors on the average performed worse in the following course areas: HIST (-.80); PHYS (-.94); CHEM (-.74); DM (-.98); MATH (-.61); GEOG (-.77); POLS (-.57); and GER (-1.55).

* Hours Transferred had a negative impact (-.006) and Missing Data--H.S. GPA (.13) had a positive impact.

TABLE 19

REGRESSAND: GRADES IN ALL COURSES FOR PHYSICAL EDUCATION MAJORS

Sample Mean = 2.68 S.D. = 1.09 N = 986

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.17	.29	.08
	74	.04	.29	.02
	73	-.30	.29	-.09
	72	-.16	.31	-.03
	71	.21	.31	.04
GPA		.85	.08	.42
HPRS		.35	.11	.14
Hours Transferred		-.006	.001	-.22
Freshman Course		-.16	.10	-.07
SPCH		.45	.22	.06
SPAN		.49	.26	.05
HIST		-.80	.16	-.17
FED		.04	.13	.01
Female		.10	.06	.04
MUS		.07	.19	.01
PHYS		-.94	.30	-.08
CHEM		-.74	.19	-.12
DM		-.98	.30	-.09
Missing Data--H.S. GPA		.13	.08	.06
BIO		-.62	.17	-.12
MATH		-.61	.17	-.12
GEOG		-.77	.25	-.08
POLS		-.57	.18	-.09
GER		-1.55	.60	-.06
Missing Data--Age		-.25	.18	-.04
MK		-1.62	.84	-.05
JOUR		-1.13	.59	-.05
AC		-.73	.39	-.05
ECI		.03	.23	.004
PHIL		-.59	.33	-.05
SOC		-.32	.15	-.06
CJ		-.58	.35	-.04
High School--GPA		-.05	.04	-.03
PSY		-.25	.16	-.05
ENG		-.19	.14	-.05
GEOL		-.42	.31	-.03
EC		-.40	.36	-.03
Minority		-.08	.09	-.03
Missing Data--SAT Math		.06	.08	.02
Senior Course		.11	.12	.03
SPE		-.36	.49	-.02
FR		.28	.50	.01
Age		-.004	.01	-.01
BED		-.24	.59	-.01
Junior Course		.03	.09	.01
Veteran		-.04	.11	-.01
Hours Attempted		-.0003	.001	-.01
BL		.24	.84	.007
ART		-.05	.27	-.005
Constant		.95		

$R^2 = .45$

R^2(Adjusted) = .43

Standard Error of Estimate = .82

Number of Majors = 56

HEGIS Code: 0835

AN ANALYSIS OF TABLE 20, SECONDARY EDUCATION MAJORS

The adjusted R^2 was .36. The highlights may be summarized as follows:

- The grading trend has been fairly stable with a slight upward trend during the period from 1971 to 1975. The estimator increased from .37 in 1971 to .58 in 1975 or by .22 of a letter grade.
- On the average, Secondary Education majors performed better in the following course areas: ECI (.46); FED (.38); SPCH (.40); MUS (.27); and BED (.55).
- Secondary Education majors performed worse on the average in the following course areas: IM (-1.15); BIO (-.57); HIST (-.26); GER (-1.17); PHIL (-.35); JOUR (-.58); BL (-.83); and PHYS (-.52).
- The variable Minority contributed a positive weight (.10), while Freshman Course (-.10) contributed a negative weight; these variables indicate that minorities tend to do better in secondary education, and freshman courses are more difficult for Secondary Education majors.

TABLE 20

REGRESSAND: GRADES IN ALL COURSES FOR SECONDARY EDUCATION MAJORS

Sample Mean = 2.84 S.D. = 1.00 N = 3039

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.58	.13	.28
74	.44	.13	.20
73	.34	.13	.13
72	.27	.14	.08
71	.36	.14	.09
GPA	.97	.04	.48
ECI	.46	.08	.15
FED	.38	.08	.11
IM	-1.15	.22	-.08
Transfer-GPA Indicator	-.02	.02	-.03
BIO	-.57	.13	-.07
HIST	-.26	.08	-.08
SPCH	.40	.12	.06
MUS	.27	.10	.05
Freshman Course	-.10	.05	-.04
AC	-.84	.26	-.05
BED	.55	.18	.05
CHEM	-.49	.17	-.05
GER	-1.17	.47	-.04
PHIL	-.35	.14	-.04
JOUR	-.58	.24	-.04
BL	-.83	.33	-.04
Hours Transferred	-.001	.001	-.04
PHYS	-.52	.23	-.03
Junior Course	.05	.05	.02
ART	-.27	.13	-.03
MGT	-.44	.29	-.02
MATH	-.14	.09	-.03
Minority	.10	.05	.03
SAT--Verbal	.0003	.0003	.02
High School--GPA	-.04	.03	-.02
Missing Data--SAT Verbal	-.0006	.14	-.0003
Hours Attempted	.0004	.0004	.02
GEOL	-.17	.13	-.02
IS	.17	.22	.01
FR	-.21	.18	-.02
RE	-.50	.47	-.02
MK	-.51	.57	-.01
UL	-.71	.81	-.01
HPRS	-.10	.12	-.01
Missing Data--Age	.06	.08	.01
SAT--Math	.0002	.0003	.01
INS	-.42	.57	-.01
SOC	.003	.09	.001
POLS	.01	.09	.003
Age	.003	.003	.01
Veteran	-.04	.05	-.02
Female	-.02	.04	-.01
PSY	-.06	.09	-.02
ENG	-.05	.08	-.02
EC	-.08	.13	-.01
Senior Course	-.02	.05	-.01
SPE	-.12	.29	-.01
SPAN	-.08	.22	-.01
Missing Data--H.S. GPA	-.02	.05	-.01
Missing Data--SAT Math	.04	.14	.02
CJ	.08	.31	.004
GEOG	-.02	.09	-.004
Constant	-.52		

R^2 = .37

R^2(Adjusted) = .36

Standard Error of Estimate = .80

Number of Majors = 144

HEGIS Code: 0803

AN ANALYSIS OF TABLE 21, SPECIAL EDUCATION MAJORS

The adjusted R^2 was .47. The highlights may be summarized as follows:

- * There was an upward grading trend from 1971 to 1974, at which point from 1974 to 1975, the trend stabilized. The ultimate results of the grading trend from 1971 to 1975 was an increase in .39 of a letter grade.
- * On the average, Special Education majors performed better in the following course areas: FED (.15); MUS (.19); SPE (.28); and ECI (.15).
- * Special Education majors on the average performed worse in the following course areas: BIO (-.83); HIST (-.52); GEOG (-.58); GEOL (-.51); POLS (-.45); AC (-.87); MGT (-1.23); CHEM (-.50); DM (-.72); and PHIL (-.40).
- * Other variables having a negative impact were: Freshman Course (-.15); and Transfer-GPA Indicator (-.03).
- * Other variables having positive impact were: SAT--Verbal (.0004); Junior Course (.19); and High School--GPA (.06).

TABLE 21

REGRESSAND: GRADES IN ALL COURSES FOR SPECIAL EDUCATION MAJORS

Sample Mean = 3.04   S.D. = 1.00   N = 5028

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.50	.10	.24
74	.51	.10	.24
73	.31	.10	.12
72	.21	.11	.06
71	.11	.11	.02
GPA	.87	.03	.49
Freshman Course	-.15	.06	-.07
Sophomore Course	.01	.06	.003
Hours Transferred	-.004	.0005	-.14
BIO	-.83	.09	-.12
HIST	-.52	.07	-.12
GEOG	-.58	.10	-.08
GEOL	-.51	.09	-.07
POLS	-.45	.08	-.07
SAT--Verbal	.0004	.0002	.03
FED	.15	.06	.04
MUS	.19	.07	.03
SPCH	.12	.08	.02
SPE	.28	.06	.11
ECI	.15	.06	.05
Junior Course	.19	.04	.09
HPRS	.09	.07	.02
Missing Data--SAT Math	.03	.03	.01
AC	-.87	.23	-.04
MGT	-1.23	.43	-.03
CHEM	-.50	.13	-.04
High School--GPA	.06	.03	.02
IM	-.72	.23	-.03
PHIL	-.40	.11	-.04
Hours Attempted	-.001	.0003	-.03
Transfer-GPA Indicator	-.03	.01	-.04
ENG	-.23	.06	-.06
SPAN	-.44	.17	-.03
Female	-.05	.04	-.01
EC	-.39	.17	-.03
SOC	-.23	.08	-.03
MATH	-.19	.07	-.04
CJ	-.58	.33	-.02
GER	-.66	.43	-.02
INS	-.71	.52	-.01
PSY	-.11	.06	-.03
MK	-.97	.73	-.01
FR	-.31	.22	-.02
PHYS	-.18	.14	-.01
SAT--Math	.0002	.0002	.01
Missing Data--H.S. GPA	.03	.04	.02
JOUR	-.48	.52	-.01
ART	-.06	.08	-.01
BL	.31	.74	.004
Missing Data--Age	.02	.06	.004
Age	-.001	.002	-.004
IS	-.16	.74	-.002
BED	.05	.25	.002
NURS	-.14	.73	-.002
Veteran	.01	.04	.001
Minority	.004	.03	.001
UL	.04	.37	.001
Constant	-.15		

R^2 = .47

R^2(Adjusted) = .46

Standard Error of Estimate = .73

Number of Majors = 216

HEGIS Code: 0899

AN ANALYSIS OF TABLE 22, ART MAJORS

The adjusted R^2 was .31. The highlights may be summarized as follows:

- The grading trend was rather stable between 1971 and 1972; however, from 1972 to 1975 an upward grading trend was observed. The estimator increased by 43% from .58 in 1971 to .83 or by .25 of a letter grade.
- On the average, Art majors performed better in the following course areas: HPRS (1.61); MK (1.67); and MGT (1.23).
- Art majors did worse on the average in IS (-1.42).
- The variable Freshman Course (-.25) had a negative impact on Art majors.

TABLE 22

REGRESSAND: GRADES IN ALL COURSES FOR ART MAJORS

Sample Mean = 2.69 S.D. = 1.01 N = 1092

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.83	.20	.38
	74	.73	.20	.31
	73	.64	.20	.24
	72	.56	.20	.18
	71	.58	.21	.18
GPA		1.01	.07	.50
Freshman Course		-.25	.09	-.12
HIST		-.21	.17	-.05
IS		-1.42	.52	-.07
HPRS		1.61	.52	.08
Transfer-GPA Indicator		-.05	.03	-.06
SPAN		-.39	.36	-.03
MK		1.67	.87	.05
MGT		1.23	.62	.05
ART		.21	.15	.11
AC		1.59	.86	.05
GER		-.05	.29	-.005
POLS		-.02	.21	-.004
Sophomore Course		-.23	.13	-.07
BIO		-.16	.34	-.01
JOUR		.60	.45	.04
PSY		.42	.25	.06
ENG		.28	.17	.09
SOC		.33	.24	.05
Hours Attempted		.0004	.0007	.02
PHIL		.30	.23	.04
MATH		.23	.19	.04
SPCH		.61	.62	.03
CHEM		.43	.52	.02
SAT--Math		-.0004	.0006	-.02
Female		-.07	.06	-.03
PHYS		-.38	.63	-.02
Hours Transferred		-.0006	.001	-.03
UL		.31	.52	.02
FED		.30	.51	.02
GEOL		.14	.22	.02
FR		.15	.25	.02
BED		.28	.52	.01
Junior Course		-.04	.09	-.01
MUS		.09	.23	.01
EC		.21	.62	.01
Veteran		-.05	.16	-.01
Minority		-.06	.17	-.02
Age		.001	.006	.006
Missing Data--Age		.04	.17	.01
High School--GPA		.01	.09	.005
GEOG		.03	.23	.004
Missing Data--H.S. GPA		.01	.09	.005
RE		-.04	.42	-.003
Constant		-.52		

R^2 = .34

R^2(Adjusted) = .31

Standard Error of Estimate = .84

Number of Majors = 59

HEGIS Code: 1002

AN ANALYSIS OF TABLE 23, MUSIC MAJORS

The adjusted R^2 was .28. The highlights may be summarized as follows:

- The grading trend between each year from 1971 to 1975 resembled a "random walk." Hence, the overall effect was a small increase, .03, of a letter grade.
- There were only two course areas, HPRS (.67) and BED (.38) that accounted for positive weights for Music majors and neither was statistically significant.
- On the average, Music majors performed worse in the following course areas: HIST (-1.29); ENG (-.78); POLS (-1.20); MATH (-.93); ART (-1.31); GER (-1.08); PHYS (-.66); BIO (-1.22); and DM (-1.76).
- The variable Freshman Course (.24) had a positive impact, while Transfer-GPA Indicator (-.05) had a negative impact.

TABLE 23

REGRESSAND: GRADES IN ALL COURSES FOR MUSIC MAJORS

Sample Mean = 3.04 S.D. = 1.05 N = 4198

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.23	.10	.09
	74	.32	.10	.12
	73	.30	.09	.12
	72	.36	.09	.14
	71	.20	.09	.06
GPA		.77	.03	.37
HIST		-1.29	.07	-.27
ENG		-.78	.06	-.19
POLS		-1.20	.11	-.15
MATH		-.93	.09	-.15
ART		-1.31	.16	-.11
Freshman Course		.24	.05	.11
GER		-1.08	.14	-.10
PHYS		-.66	.11	-.08
BIO		-1.22	.22	-.07
DM		-1.76	.33	-.07
MUS		-.27	.04	-.13
FR		-.91	.18	-.07
GEOL		-.92	.18	-.07
CHEM		-1.53	.34	-.06
PHIL		-.94	.23	-.06
PSY		-.73	.21	-.05
Hours Attempted		-.001	.0004	-.06
SPAN		-.96	.37	-.03
GEOG		-1.53	.63	-.03
Transfer-GPA Indicator		-.05	.02	-.06
SOC		-.59	.26	-.03
SPCH		-.56	.30	-.02
Age		-.01	.004	-.03
Missing Data--SAT Math		.02	.05	.01
FED		-.27	.16	-.02
Senior Course		.09	.07	.02
AC		-.81	.41	-.03
RE		-.87	.46	-.03
Veteran		.13	.08	.02
Minority		.11	.07	.03
EC		-.34	.25	-.02
IS		-.51	.40	-.02
HPRS		.67	.63	.01
Hours Transferred		.001	.001	.02
SAT--Math		.0004	.0003	.03
SAT--Verbal		-.0002	.0003	-.02
MGT		-.63	.90	-.01
MK		-.52	.90	-.01
BED		.38	.90	.01
Missing Data--H.S. GPA		.03	.06	.01
BL		-.19	.64	-.004
Sophomore Course		-.01	.05	-.005
Missing Data--Age		-.03	.12	-.004
Female		-.01	.03	-.003
Constant		1.02		

$R^2 = .29$

R^2(Adjusted) = .28

Standard Error of Estimate = .89

Number of Majors = 139

HEGIS Code: 1005

AN ANALYSIS OF TABLE 24, STUDIO MAJORS

The adjusted R^2 was .32. The highlights may be summarized as follows:

- * There was a slight downward trend from 1971 to 1972, as the estimator decreased from -.10 to -.13. From 1972 to 1975, an upward trend was observed. The final results from 1971 to 1975 was a .18 increase of a letter grade.
- * On the average, Studio majors did better in the following course areas: HPRS (.38); and BED (.42).
- * Studio majors on the average performed worse in the following course areas: HIST (-.46); MATH (-.30); BIO (-.36); GEOL (-.31); GEOG (-.31); PHYS (-.51); GER (-.44); and DM (-.45).
- * The variables Senior Course (.26) and Junior Course (.12) both contributed positive weights.

TABLE 24

REGRESSAND: GRADES IN ALL COURSES FOR STUDIO MAJORS

Sample Mean = 2.75 S.D. = 1.00 N = 6842

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.08	.08	.04
	74	.06	.08	.03
	73	-.08	.08	-.03
	72	-.13	.08	-.04
	71	-.10	.09	-.03
GPA		.92	.02	.50
ART		.02	.06	.01
Freshman Course		.05	.05	.02
HIST		-.46	.07	-.11
Hours Transferred		-.001	.0003	-.04
HPRS		.38	.16	.03
MUS		.12	.09	.02
Senior Course		.23	.05	.09
ENG		.004	.07	.001
BED		.42	.17	.03
FED		.12	.15	.01
SPCH		.21	.18	.01
AC		-.68	.24	-.03
POLS		-.37	.08	-.06
Junior Course		.12	.05	.05
EC		.21	.18	.01
MATH		-.30	.08	-.05
BIO		-.36	.10	-.04
GEOL		-.31	.09	-.05
GEOG		-.31	.10	-.04
PHYS		-.51	.19	-.03
GER		-.44	.16	-.03
IM		-.45	.18	-.03
FI		-.81	.42	-.02
Missing Data--SAT Verbal		.05	.03	.03
Minority		-.05	.04	-.02
Transfer-GPA Indicator		-.01	.01	-.02
SPAN		-.28	.17	-.02
SPE		.58	.48	.01
SAT--Verbal		.0002	.0002	.01
FR		-.16	.12	-.02
Hours Attempted		.0002	.0003	.01
Missing Data--H.S. GPA		-.03	.04	-.01
PHIL		-.13	.11	-.02
JOUR		-.39	.38	-.01
CHEM		-.1[illegible]	.15	-.01
UL		-.33	.42	-.01
Veteran		-.02	.03	-.01
High School--GPA		.01	.03	.01
Female		-.01	.02	-.01
Missing Data--Age		-.03	.06	-.01
INS		-.40	.83	-.005
RE		-.13	.25	-.01
PSY		-.06	.11	-.01
CJ		-.22	.59	-.004
SOC		-.04	.11	-.005
MGT		-.08	.22	-.004
ECI		-.11	.42	-.003
BL		.09	.48	.002
SAT--Math		.00003	.0002	.002
MK		-.02	.20	-.001
Constant		.10		

R^2 = .33

R^2(Adjusted) =.32

Standard Error of Estimate = .83

Number of Majors = 350

HEGIS Code: 1099

AN ANALYSIS OF TABLE 25, FRENCH MAJORS

The adjusted R^2 was .39. The highlights may be summarized as follows:

* The grading trend fluctuated somewhat between 1971 and 1973; however, in 1973 an upward trend set in, and continued through 1975. Hence, between the years 1971 and 1975, the estimator increased from -.07 to .30 or increased a letter grade by .37.

* On the average, French majors performed better in the following course areas: PSY (.23); ECI (.12); BL (.68); MK (.39); and JOUR (.40). (None of the above course areas had a statistically significant impact).

* French majors on the average performed worse in the following course areas: POLS (-.95); GEOG (-.84); HIST (-.58); AC (-1.19); GEOL (-.72); and EC (-.59).

* Hours Attempted (.002) had a significant positive impact on French majors.

TABLE 25

REGRESSAND: GRADES IN ALL COURSES FOR FRENCH MAJORS

Sample Mean = 3.07   S.D. = .89   N = 498

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.30	.20	.16
74	.19	.19	.10
73	.06	.21	.02
72	.11	.20	.04
71	-.07	.20	-.02
GPA	.88	.09	.52
POLS	-.95	.18	-.23
Hours Attempted	.002	.001	.11
Senior Course	.19	.11	.08
GEOG	-.84	.23	-.15
HIST	-.58	.16	-.18
AC	-1.19	.43	-.10
GEOL	-.72	.21	-.14
SPAN	.18	.18	.05
EC	-.59	.28	-.08
PSY	.23	.22	.04
FR	-.02	.12	-.01
ECI	.12	.21	.03
SAT--Verbal	.001	.002	.09
Transfer-GPA Indicator	-.03	.04	-.04
SOC	-.43	.21	-.08
BL	.68	.71	.03
MGT	-.71	.51	-.05
MK	.39	.51	.03
Freshman Course	.17	.11	.09
MATH	-.41	.18	-.10
ART	-.42	.26	-.06
ENG	-.28	.15	-.09
PED	-.30	.22	-.05
BIO	-.33	.31	-.04
Sophomore Course	.09	.11	.04
GER	-.25	.27	-.04
IS	-.42	.51	-.03
PHIL	-.20	.22	-.04
MUS	-.21	.31	-.03
Veteran	-.11	.19	-.03
JOUR	.40	.73	.02
SPCH	-.21	.42	-.02
NURS	-.20	.39	-.02
High School--GPA	-.02	.08	-.02
Missing Data--SAT Verbal	-.05	.17	-.03
Female	.05	.15	.02
SAT--Math	-.001	.002	-.03
Hours Transferred	-.0003	.001	-.01
Missing Data--H.S. GPA	.04	.22	..02
Constant	-.10		

R^2 = .45

R^2(Adjusted) = .39

Standard Error of Estimate = .69

Number of Majors = 26

HEGIS Code: 1102

AN ANALYSIS OF TABLE 26, GERMAN MAJORS

The adjusted R^2 was .33. The highlights may be summarized as follows:

- The estimator decreased by approximately 84%, or .48 of a letter grade, from 1971 to 1972. From 1972 to 1975 an upward trend existed. The overall result from 1971 to 1975 was a decrease in .11 of a letter grade.
- On the average, German majors did better in Music than in other course areas (MUS-.55).
- German majors on the average perform worse in the following course areas: MATH (-.72); AC (-1.48); DM (-2.55): PHYS (-1.19); and POLS (-.54).
- No other variables had a statistically significant impact on German majors.

TABLE 26

REGRESSAND: GRADES IN ALL COURSES FOR GERMAN MAJORS

Sample Mean = 2.92   S.D. = .90   N = 672

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.40	.26	.21
	74	.32	.26	.17
	73	.30	.27	.13
	72	.03	.27	.01
	71	.51	.29	.11
GPA		.87	.10	.44
MUS		.55	.17	.13
MATH		-.72	.17	-.17
AC		-1.48	.37	-.14
IM		-2.55	.76	-.11
GER		.11	.12	.06
PHYS		-1.19	.54	-.07
POLS		-.54	.21	-.09
Senior Course		.13	.11	.05
Hours Attempted		.001	.001	.05
ENG		.07	.14	.02
Freshman Course		.12	.10	.07
PSY		.21	.29	.03
SPAN		.16	.28	.02
ECI		.37	.54	.02
FR		-.01	.25	-.002
PHIL		-.02	.21	-.003
Veteran		.12	.18	.03
GEOL		-.32	.23	-.05
ART		-.42	.33	-.04
BIO		-.28	.22	-.05
FED		.21	.54	.01
Transfer-GPA Indicator		-.01	.08	-.02
Age		.00[illegible]	.006	.03
Junior Course		-.07	.10	-.03
MGT		-.67	.76	-.03
BED		-.35	.33	-.04
SOC		-.29	.23	-.05
HIST		-.19	.14	-.06
EC		-.31	.29	-.04
CHEM		-.37	.34	-.04
JOUR		-.55	.76	-.02
SPCH		-.28	.35	-.03
MK		-.51	.76	-.02
Female		.03	.08	.02
GEOG		-.11	.26	-.01
Minority		.06	.17	.01
SAT--Math		-.0003	.001	-.02
Missing Data--H.S. GPA		-.09	.17	-.05
Missing Data--SAT Math		.07	.16	.04
SAT--Verbal		.0002	.001	.02
High School--GPA		.02	.10	.01
Hours Transferred		.0002	.002	.01
Constant		-.15		

R^2 = .38

R^2(Adjusted) = .33

Standard Error of Estimates = .74

Number of Majors = 30

HEGIS Code: 1103

AN ANALYSIS OF TABLE 27, SPANISH MAJORS

The adjusted R^2 was .50. The highlights may be summarized as follows:

- An upward trend was observed between 1971 and 1974; however, this upward trend reversed itself during the period from 1974 to 1975, as the estimator decreased from .30 to .18. The total effect on the grading trend from 1971 to 1975 was a slight decrease in a letter grade of .01.

- Spanish majors performed better on the average in the following course areas: SPAN (.25); ECI (.35); and MGT (.88).

- On the average, Spanish majors performed worse in the following course areas: HIST (-.74); POLS (-.76); GEOG (-.71); AC (-1.95); GEOL (-.70); MATH (-.51); and BIO (-.63).

- The variable Veteran (.90) weighted positively; the researcher does not find this relationship to be obvious.

TABLE 27

REGRESSAND: GRADES IN ALL COURSES FOR SPANISH MAJORS

Sample Mean = 2.85 S.D. = 1.06 N = 975

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.18	.26	.08
74	.30	.26	.13
73	.22	.26	.08
72	.18	.25	.06
71	.19	.26	.05
GPA	.90	.06	.56
SPAN	.25	.12	.11
Freshman Course	.05	.09	.02
HIST	-.74	.14	-.20
ECI	.35	.18	.06
POLS	-.76	.16	-.15
Veteran	.90	.41	.06
MGT	.88	.39	.05
FED	.20	.18	.03
MUS	.26	.21	.03
GEOG	-.71	.18	-.12
AC	-1.95	.77	-.06
GEOL	-.70	.20	-.10
MATH	-.51	.16	-.10
BIO	-.63	.21	-.08
SPCH	.54	.40	.03
Transfer-GPA Indicator	-.05	.04	-.06
MK	-.81	.45	-.04
SR	.13	.10	.04
ART	-.42	.21	-.05
PHIL	-.39	.20	-.06
Missing Data--Age	-.34	.20	-.06
Missing Data--H.S. GPA	.08	.13	.04
CHEM	-.70	.45	-.04
ENG	-.22	.14	-.07
JOUR	-.47	.31	-.04
EC	-.38	.24	-.04
RE	-.70	.76	-.02
FR	-.16	.19	-.02
PSY	-.18	.20	-.02
Hours Attempted	-.0005	.001	-.02
Hours Transferred	-.0013	.002	-.04
HPRS	.30	.55	.01
BED	.22	.47	.01
IS	.42	.85	.01
Missing Data--SAT Math	.09	.13	.04
DM	.35	.76	.01
PHYS	-.22	.45	-.01
SOC	-.06	.16	-.01
GER	-.06	.21	-.008
Minority	.03	.11	.01
Junior Course	.02	.09	.006
SAT--Math	-.0003	.0006	-.02
SAT--Verbal	.0002	.0006	.02
Female	.01	.08	.006
Age	-.0008	.005	-.005
Constant	.27		

R^2 = .52

R^2(Adjusted) = .50

Standard Error of Estimate = .75

Number of Majors = 42

HEGIS Code: 1105

AN ANALYSIS OF TABLE 28, COMMUNITY HEALTH NUTRITION MAJORS

The adjusted R^2 was .43. The highlights may be summarized as follows:

- Although a downward trend occurred between 1971 and 1972, the trend reversed itself in 1972 and continued upward through 1975; the estimator increased from .52 in 1971 to .71 or by 37%, which is equivalent to .19 of a letter grade.

- On the average, Community Health Nutrition majors did better in HPRS (.78); and PSY (.34). (Neither course area was statistically significant).

- Community Health Nutrition majors performed worse in the following course areas: BIO (-.43); CHEM (-.40); DM (-1.18); PHYS (-1.05); MK (-1.00); and JOUR (-.58).

- The variable Junior Course (.28) had a positive impact.

TABLE 28

REGRESSAND: GRADES IN ALL COURSES FOR COMMUNITY HEALTH NUTRITION MAJORS

Sample Mean = 3.02 S.D. = 99 N = 397

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.71	.50	.35
	74	.60	.49	.27
	73	.52	.49	.19
	72	.41	.48	.13
	71	.52	.48	.13
GPA		1.24	.30	.76
Junior Course		.28	.14	.13
BIO		-.43	.15	-.13
CHEM		-.40	.16	-.13
HPRS		.78	.40	.08
Hours Transferred		-.01	.01	-.36
DM		-1.18	.55	-.08
PHYS		-1.05	.46	-.09
PSY		.34	.25	.06
FR		-.74	.49	-.07
HIST		-.31	.23	-.06
POLS		-.35	.26	-.06
EC		-.28	.31	-.04
MK		-1.00	.49	-.09
Hours Attempted		.003	.002	.14
JOUR		-.58	.29	-.10
SAT--Math		.004	.003	.16
AC		-.60	.42	-.06
Age		.02	.02	.12
MATH		-.11	.20	-.03
PHIL		-.21	.30	-.03
GER		-.23	.47	-.02
ART		.94	.77	.05
GEOG		.55	.55	.04
High School--GPA		.38	.29	.13
Senior Course		.22	.19	.07
SOC		.43	.38	.05
ENG		.21	.21	.05
SPCH		.30	.33	.04
GEOL		.33	.56	.02
Transfer-GPA Indicator		.08	.20	.11
IS		.40	.77	.02
Sophomore Course		-.08	.15	-.03
SPAN		.34	.80	.02
Missing Data--SAT Math		1.36	1.20	.67
Missing Data--Age		-.28	.30	-.07
MGT		.08	.25	.01
FED		-.21	.77	-.01
Female		-.77	.71	-.17
SAT--Verbal		-.01	.01	-.49
Missing Data--H.S. GPA		-1.18	1.13	-.58
Minority		.03	.20	.01
Constant		.18		

$R^2 = .50$

R^2(Adjusted) = .43

Standard Error of Estimate = .75

Number of Majors = 18

HEGIS Code: 1214

AN ANALYSIS OF TABLE 29, HEALTH ADMINISTRATION MAJORS

The adjusted R^2 was .38. The highlights may be summarized as follows:

- With the exception of a constant estimator between 1973 and 1974, there was a continued upward grading trend observed. The estimator increased from .18 in 1971 to .61 in 1975, which represented a .43 of a letter grade increase.
- On the average, Health Administration majors performed better in the following course areas: SPCH (.13); FED (.70); MUS (.48); and GER (.13). (None of the above course areas were statistically significant).
- Health Administration majors performed worse in the following course areas: IS (-1.23); BIO (-1.31); AC (-.77); POLS (-1.04); DM (-.70); HIST (-.91); FI (-.84); ENG (-.68); PHYS (-1.03); CHEM (-.79); and RE (-.72).
- The variable Female (.21) had a significant positive impact.

TABLE 29

REGRESSAND: GRADES IN ALL COURSES FOR HEALTH ADMINISTRATION MAJORS

Sample Mean = 2.70 S.D. = 1.04 N = 1072

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.61	.31	.29
	74	.43	.31	.19
	73	.43	.31	.16
	72	.40	.32	.10
	71	.18	.33	.03
GPA		.81	.06	.46
Senior Course		-.06	.11	-.02
IS		-1.23	.16	-.25
BIO		-1.31	.23	-.16
AC		-.77	.13	-.22
POLS		-1.04	.22	-.14
DM		-.70	.12	-.22
HIST		-.91	.20	-.13
FI		-.84	.19	-.13
Female		.21	.10	.07
ENG		-.68	.15	-.15
Hours Transferred		-.001	.001	-.05
PHYS		-1.03	.30	-.09
CHEM		-.79	.27	-.08
RE		-.72	.19	-.11
SPCH		.13	.39	.01
FED		.70	.84	.02
PHIL		-.96	.49	-.05
Veteran		.11	.08	.04
HL		-.61	.18	-.11
SOC		-.57	.20	-.08
EC		-.47	.15	-.11
MGT		-.43	.13	-.10
INS		-.65	.21	-.09
MK		-.53	.17	-.10
GEOG		-.56	.25	-.06
SPAN		-.83	.50	-.04
MATH		-.46	.27	-.05
PSY		-.33	.20	-.05
CJ		-.72	.49	-.04
Junior Course		.10	.10	.04
Missing Data--Age		-.19	.16	-.03
NURS		-.25	.23	-.03
GEOL		-.47	.50	-.02
BED		-.25	.29	-.02
ART		-.30	.38	-.02
JOUR		-.70	.84	-.02
Transfer-GPA Indicator		-.02	.03	-.02
Missing Data--Verbal		.03	.08	.02
High School--GPA		.04	.05	.02
MUS		.48	.84	.01
Minority		-.03	.09	-.01
Missing Data--H.S. GPA		.03	.12	.01
Hours Attempted		.0003	.001	.01
Freshman Course		.02	.11	.01
SAT--Verbal		.0004	.001	.02
SAT--Math		-.0003	.001	-.02
GER		.13	.84	.004
Constant		.37		

R^2 = .41

R^2(Adjusted) = .38

Standard Error of Estimate = .82

Number of Majors = 53

HEGIS Code: 1202

AN ANALYSIS OF TABLE 30, MEDICAL TECHNOLOGY MAJORS

The adjusted R^2 was .38. The highlights may be summarized as follows:

- * The pattern of the grading trend between 1971 and 1975 as indicated by the estimator was a decrease from .28 in 1971 to -.001 in 1972, an increase to .11 in 1973, to .27 in 1974 and then a decrease to .22 in 1975, with the total effect between 1971 and 1975 being a decrease of .04 of a letter grade.
- * On the average, Medical Technology majors did better in the following course areas: MATH (.32); PSY (.52); MUS (.47); SOC (.49); and BL (1.15).
- * Medical Technology majors on the average did worse in the following course areas: HIST (-.28); PHYS (-.26); CHEM (-.15); and POLS (-.24).
- * The variable Freshman Course (.20) had a positive impact on Medical Technology majors.

TABLE 30

REGRESSAND: GRADES IN ALL COURSES FOR MEDICAL TECHNOLOGY MAJORS

Sample Mean = 2.74 S.D. = .94 N = 2537

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.22	.21	.11
	74	.26	.21	.13
	73	.11	.21	.05
	72	-.001	.22	-.0002
	71	.28	.23	.05
GPA		.96	.03	.59
MATH		.32	.09	.07
PSY		.52	.10	.10
MUS		.47	.18	.04
SOC		.49	.14	.06
Sophomore Course		-.08	.07	-.03
ENG		.14	.08	.03
BL		1.15	.53	.03
BED		.77	.38	.03
HIST		-.28	.11	-.05
MK		.96	.53	.03
INS		1.11	.74	.02
RE		1.20	.74	.03
Transfer-GPA Indicator		.01	.02	.02
Veteran		-.10	.06	-.03
EC		.26	.21	.02
FR		.44	.37	.02
Hours Attempted		.001	.001	.05
Hours Transferred		.001	.0005	.05
FED		.72	.52	.02
GEOL		.38	.43	.01
GEOG		-1.14	.74	-.02
MGT		.49	.37	.02
CJ		.39	.31	.02
Freshman Course		.20	.07	.10
PHYS		-.26	.10	-.05
CHEM		-.15	.06	-.06
POLS		-.24	.11	-.04
ART		-.38	.25	-.02
Missing Data--Age		.11	.10	.02
ECI		.92	.74	.02
JOUR		-.87	.74	-.02
Missing Data--H.S. GPA		.03	.07	.01
PHIL		-.15	.17	-.01
DM		-.26	.29	-.01
High School--GPA		-.03	.05	-.01
SPAN		-.24	.37	-.01
AC		.17	.29	.01
HPRS		.18	.34	.01
Missing Data--SAT Math		.03	.04	.01
SAT--Verbal		.0002	.0003	.01
GER		.24	.53	.01
Senior Course		-.02	.05	-.01
IS		-.07	.19	-.01
SPCH		-.07	.34	-.003
Age		.001	.005	.004
UL		.09	.74	.002
Minority		.01	.06	.002
Constant		-.32		

R^2 = .39

R^2(Adjusted) = .38

Standard Error of Estimate = .74

Number of Majors = 122

HEGIS Code: 1223

AN ANALYSIS OF TABLE 31, NURSING MAJORS

The adjusted R^2 was .45. The highlights may be summarized as follows:

- There was a slight downward trend from 1971 to 1972. An upward trend was observed between 1972 and 1974, with another slight downward trend from 1974 to 1975. This grading trend pattern between 1971 and 1975 accounted for an increase of .22 of a letter grade.
- On the average, Nursing majors performed better in the following course areas: NURS (.33); PSY (.43); FED (.54); MUS (.57); SOC (.29); HPRS (1.02); ENG (.10); FR (.40); MGT (.25); and UL (.76).
- Nursing majors performed worse on the average in the following course areas: HIST (-.46); CHEM (-.41); BIO (-.27); POLS (-.34); MATH (-.14); ART (-.33); and DM (-1.01).
- Sophomore Course (-.09) had a negative impact, and Freshman Course (.14) had a positive impact.

TABLE 31

REGRESSAND: GRADES IN ALL COURSES FOR NURSING MAJORS

Sample Mean = 2.76 S.D. = .98 N = 7929

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.31	.08	.15
	74	.32	.08	.15
	73	.13	.08	.05
	72	.07	.08	.02
	71	.03	.08	.02
GPA		.90	.02	.57
NURS		.33	.04	.15
PSY		.43	.05	.11
FED		.54	.07	.08
MUS		.57	.09	.06
SOC		.29	.05	.07
HPRS		1.02	.15	.06
ENG		.10	.04	.03
HIST		-.46	.06	-.10
Sophomore Course		-.09	.03	-.04
CHEM		-.41	.06	-.08
BIO		-.27	.05	-.09
POLS		-.34	.06	-.07
Hours Transferred		-.001	.0003	-.03
MATH		-.14	.06	-.03
ART		-.33	.10	-.03
Freshman Course		.14	.02	.07
Missing Data--SAT Math		.02	.03	.01
DM		-1.01	.42	-.02
FR		.40	.14	.03
MGT		.25	.08	.03
Hours Attempted		.001	.0002	.02
SAT--Verbal		.0002	.0002	.02
UL		.76	.33	.02
SPCH		.28	.15	.02
ECI		.54	.33	.01
Transfer-GPA Indicator		-.02	.01	-.02
Missing Data--H.S. GPA		.04	.03	.02
IS		.77	.52	.01
Veteran		.04	.04	.01
High School--GPA		.03	.02	.01
GEOL		-.19	.20	-.01
MK		-.49	.52	-.01
RE		.80	.73	.01
Missing Data--Age		.04	.04	.01
BL		.51	.52	.01
PHIL		.09	.07	.01
PHYS		.07	.05	.01
EC		.23	.25	.01
SPAN		.15	.18	.01
JOUR		.28	.37	.01
Senior Course		.02	.05	.004
Minority		-.005	.02	-.002
BED		-.09	.33	-.002
Female		.01	.04	.002
SAT--Math		.00004	.0002	.003
GER		-.05	.26	-.002
SPE		-.08	.52	-.001
GEOG		-.02	.15	-.001
Constant		-.35		

R^2 = .45

R^2(Adjusted) = .45

Standard Error of Estimate = .73

Number of Majors = 340

HEGIS Code: 1203

AN ANALYSIS OF TABLE 32, PHYSICAL THERAPY MAJORS

The adjusted R^2 was .42. The highlights may be summarized as follows:

- There was a constant upward trend between 1971 and 1975, as the estimator increased by 147%, from .36 in 1971 to .89 in 1975. This represented an average of 37% increase per year. The total effect between 1971 and 1975 was an increase in .53 of a letter grade.
- On the average, Physical Therapy majors did better in PSY (.43); and FED (.34).
- Physical Therapy majors on the average did worse in the following course areas: BIO (-.64); PHYS (-.86); HIST (-.77); CHEM (-.57); DM (-2.68); POLS (-.60); MATH (-.43); and ENG (-.22).
- The variables Transfer-GPA Indicator (-.05) and Age (-.004) had negative impacts, while the variable Freshman Course (.22) had a positive impact.

TABLE 32

REGRESSAND: GRADES IN ALL COURSES FOR PHYSICAL THERAPY MAJORS

Sample Mean = 3.09 S.D. = .88 N = 1905

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.89	.35	.50
	74	.81	.35	.44
	73	.64	.35	.26
	72	.37	.35	.10
	71	.36	.35	.07
GPA		.91	.04	.51
PSY		.43	.06	.13
BIO		-.64	.08	.16
PHYS		-.86	.12	-.19
HIST		-.77	.14	-.13
CHEM		-.57	.11	-.16
DM		-2.68	.68	-.07
POLS		-.60	.15	-.09
Hours Attempted		.001	.001	.04
FED		.34	.14	.04
Sophomore Course		-.09	.10	-.03
Transfer--GPA Indicator		-.05	.02	-.07
MATH		-.43	.13	-.08
Junior Course		-.07	.04	-.04
EC		.46	.34	.02
GEOG		.62	.48	.02
Missing Data--H.S. GPA		.13	.07	.06
ECI		1.10	.67	.03
Freshman Course		.22	.11	.10
ENG		-.22	.05	-.11
PHIL		-.34	.22	-.03
High School--GPA		.07	.07	.02
Age		-.004	.01	-.01
GEOL		-.32	.35	-.02
AC		.55	.67	.01
Hours Transferred		-.0004	.001	-.02
CJ		-.26	.39	-.01
SPCH		.39	.68	.01
SAT--Math		-.0001	.0003	-.01
Minority		-.04	.07	-.01
RE		-.28	.67	-.01
Female		.01	.04	.01
MUS		-.21	.68	-.01
Veteran		-.02	.08	-.004
HPRS		-.09	.48	-.003
SAT--Verbal		-.0001	.01	-.01
Missing Data--SAT Verbal		-.01	.04	-.003
SPAN		.04	.31	.002
GER		-.08	.68	-.002
Constant		-.48		

R^2 = .44

R^2(Adjusted) = .42

Standard Error of Estimate = .67

Number of Majors = 83

HEGIS Code: 1212

AN ANALYSIS OF TABLE 33, CLASSICS MAJORS

* Due to the small number of majors (6), valid statistical conclusions cannot be stated as significant; however, the findings will be presented in order that some notion of causal effect is conveyed.

The adjusted R^2 was .35. The highlights may be summarized as follows:

* After a strong upward trend between 1971 and 1972, the estimator reversed itself from 1972 to 1973 by establishing a brief downward trend; but from 1973 to 1975 the estimator again reverted to an upward trend. The final effect was an increase in the estimator of 1971 (.44) by 22% to 1.41 in 1975 or in other words an increase of .97 of a letter grade.

* On the average, Classics majors performed better in the following course areas: PSY (.43); and MATH (.18). (Neither of the above variables was statistically significant).

* Classics majors on the average performed worse in the following course areas: HIST (-.42); and POLS (-.89).

* The variable Missing Data--Age(.60) had a positive weight, but was not statistically significant.

TABLE 33

REGRESSAND: GRADES IN ALL COURSES FOR CLASSICS MAJORS

Sample Mean = 3.34 S.D. = .72 N = 126

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	1.41	.45	.93
	74	1.34	.45	.86
	73	.93	.45	.53
	72	1.10	.46	.51
	71	.44	.72	.06
GPA		.43	.56	.15
Hours Attempted		.01	.002	.52
HIST		-.42	.17	-.21
POLS		-.89	.36	-.19
GEOG		-1.13	.61	-.14
PSY		.43	.27	.14
ART		-.57	.36	-.12
GEOL		-.52	.28	-.16
ENG		-.31	.21	-.12
FR		-.26	.26	-.08
Missing Data--Age		.60	.38	.24
JOUR		-.77	.63	-.10
Missing Data--SAT Verbal		-.17	.17	-.12
BIO		-.48	.64	-.06
Senior Course		-.11	.21	-.05
MATH		.18	.29	.05
PHIL		-.22	.43	-.04
Junior Course		.06	.15	.04
Sophomore Course		-.04	.16	-.02
Constant		.04		

R^2 = .47

R^2(Adjusted) = .35

Standard Error of Estimate = .58

Number of Majors = 6

HEGIS Code: 1504

AN ANALYSIS OF TABLE 34, ENGLISH MAJORS

The adjusted R^2 was .37. The highlights may be summarized as follows:

* An upward trend was observed between 1971 and 1974, as the estimator increased from -.01 to .28 over the two year period; however, the estimator was constant between 1974 and 1975. The results of the above trend description from 1971 to 1972 was a .29 increase in a letter grade.
* On the average, English majors performed better in the following course areas: FED (.36); and ECI (.34).
* English majors on the average performed worse in the following course areas: MATH (-.52); HIST (-.42); FR (-.43); BIO (-.47); GEOG (-.50); CHEM (-.48); GEOL (-.43); and GER (-.44).
* Transfer-GPA Indicator (-.04), had a negative impact.
* The following variables had a positive impact on English majors: Veteran (.07); Sophomore Course (.12); and SAT--Verbal (.0005).

TABLE 34

REGRESSAND: GRADES IN ALL COURSES FOR ENGLISH MAJORS

Sample Mean = 2.84 S.D. = 1.04 N = 5237

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.28	.08	.12
74	.28	.08	.12
73	.20	.08	.08
72	.11	.08	.04
71	-.01	.09	-.003
GPA	.97	.02	.57
Freshman Course	.09	.05	.04
ENG	.04	.04	.02
FED	.36	.09	.05
ECI	.34	.09	.04
Transfer-GPA Indicator	-.04	.01	-.05
MATH	-.52	.07	-.10
HIST	-.42	.06	-.10
FR	-.43	.06	-.09
MUS	.14	.09	.02
BIO	-.47	.09	-.06
GEOG	-.50	.10	-.06
CHEM	-.48	.10	-.05
GEOL	-.43	.08	-.06
GER	-.44	.09	-.06
PHYS	-.67	.18	-.04
POLS	-.32	.08	-.05
ART	-.33	.08	-.05
DM	-.63	.22	-.03
Sophomore Course	.12	.04	.05
AC	-.56	.25	-.02
Veteran	.07	.03	.02
PHIL	-.15	.06	-.03
JOUR	-.20	.10	-.02
MK	-.42	.26	-.02
SPE	1.26	.83	.02
Hours Attempted	.0003	.0003	.02
Missing Data--H.S. GPA	.05	.04	.02
SAT--Verbal	.0005	.0002	.03
EC	-.23	.14	-.02
Junior Course	.05	.04	.02
Missing Data--SAT Math	.05	.04	.02
Hours Transferred	-.001	.0004	-.02
RE	-.40	.34	-.01
Missing Data--Age	-.07	.08	-.01
SAT--Math	-.0002	.0002	-.01
SPCH	.09	.12	.01
MGT	-.29	.22	-.01
PSY	-.06	.07	-.01
Female	.02	.03	.01
High School--GPA	-.03	.05	-.01
HPRS	.14	.22	.01
CJ	-.15	.23	-.01
IS	-.14	.22	-.01
NURS	-.13	.25	-.01
INS	.41	.82	.01
BED	.05	.17	.003
FI	.21	.83	.003
UL	-.20	.82	-.003
SPAN	-.02	.08	-.003
BL	-.04	.28	-.002
AS	.12	.82	.002
Minority	-.01	.06	-.002
Age	.0003	.002	.002
Constant	-.18		

$R^2 = .38$

R^2(Adjusted) = .37

Standard Error of Estimate = .82

Number of Majors = 241

HEGIS Code: 1502

AN ANALYSIS OF TABLE 35, PHILOSOPHY MAJORS

The adjusted R^2 was .32. The highlights may be summarized as follows:

- An upward trend was observed between 1971 and 1975, as the estimator increased from .02 in 1971 to .35 in 1975. The overall effect was an increase of .33 of a letter grade.
- On the average, Philosophy majors did better in the following course areas: MGT (1.71); and BL (.96).
- Philosophy majors did worse on the average in the following course areas: BIO (-1.18); MATH (-.62); FR (-.45); GER (-.41); and CHEM (-.75).
- Transfer-GPA Indicator (-.06) had a significant negative impact.

TABLE 35

REGRESSAND: GRADES IN ALL COURSES FOR PHILOSOPHY MAJORS

Sample Mean = 2.80 S.D. = 1.07 N = 969

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.35	.20	.14
	74	.25	.19	.10
	73	.16	.19	.06
	72	.10	.20	.03
	71	.02	.19	.01
GPA		.99	.07	.51
BIO		-1.18	.30	-.11
MATH		-.62	.18	-.11
FR		-.45	.17	-.09
GER		-.41	.17	-.08
CHEM		-.75	.29	-.07
MGT		1.71	.63	.07
BL		.96	.38	.07
PHIL		.21	.11	.09
HPRS		1.22	.64	.05
Transfer-GPA Indicator		-.06	.03	-.08
FED		.86	.45	.05
PSY		.24	.15	.06
Freshman Course		.18	.10	.08
GEOG		-.45	.24	-.06
HIST		-.19	.14	-.05
MUS		.27	.20	.04
IS		-.59	.46	-.04
Hours Attempted		.001	.001	.05
SPAN		.20	.25	.02
ED		.32	.29	.03
Female		.10	.07	.05
Veteran		.11	.10	.04
JOUR		-.49	.46	-.03
ART		-.18	.20	-.03
Missing Data--SAT Verbal		-.25	.26	-.11
Missing Data--H.S. GPA		.07	.10	.03
SOC		-.14	.22	-.02
Missing Data--SAT Math		.16	.24	.07
FI		.58	.90	.02
Sophomore Course		-.05	.09	-.02
SPCH		.16	.31	.01
High School--GPA		-.02	.05	-.01
Hours Transferred		.0002	.001	.01
BED		-.10	.53	-.01
AC		.14	.46	.01
CJ		.16	.52	.01
RE		-.17	.89	-.01
Minority		.04	.15	.01
ENG		.03	.14	.01
POLS		.04	.17	.01
SAT--Verbal		-.0002	.001	-.01
Missing Data--Age		-.03	.19	-.01
SAT--Math		.0001	.001	.004
Constant		-.26		

R^2 = .36

R^2(Adjusted) = .32

Standard Error of Estimate = .88

Number of Majors = 48

HEGIS Code: 1509

AN ANALYSIS OF TABLE 36, MATHEMATICS MAJORS

The adjusted R^2 was .44. The highlights may be summarized as follows:

- A downward trend was observed from 1971 to 1972. After 1972, an upward trend set in and continued through 1975. The total inflationary effect was small between 1971 and 1975, as the increase in the estimator was only 38% or .03 of a letter grade.
- On the average, Mathematics majors did better in the following course areas: ECI (.40); and DM (.49).
- Mathematics majors on the average performed worse in the following course areas: HIST (-.68); AS (-1.00); ART (-.67); FI (-1.54); BIO (-.63); PHYS (-.40); CHEM (-.41); ENG (-.30); POLS (-.40); FR (-.30); and IS (-.23).
- Veterans tended not to do as well in Mathematics; the impact was negative (-.11).
- Senior Courses (-.21) tended to be more difficult for Mathematics majors.

TABLE 36

REGRESSAND: GRADES IN ALL COURSES FOR MATHEMATICS MAJORS

Sample Mean = 2.75 S.D. = 1.11 N = 3086

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.11	.12	.04
	74	.12	.12	.05
	73	.05	.12	.02
	72	-.02	.12	-.01
	71	.08	.13	.02
GPA		.98	.03	.63
HIST		-.68	.11	-.15
Senior Course		-.21	.05	-.08
ECI		.40	.16	.04
DM		.49	.18	.04
EC		.21	.13	.03
AS		-1.00	.21	-.07
Junior Course		.09	.06	.03
MUS		.15	.14	.02
ART		-.67	.16	-.07
FI		-1.54	.49	-.04
BIO		-.63	.16	-.06
FED		.14	.15	.02
RE		.36	.24	.02
MGT		.26	.22	.02
HPRS		.48	.35	.02
PHYS		-.40	.12	-.06
CHEM		-.41	.12	-.07
ENG		-.30	.10	-.08
POLS		-.40	.12	-.06
PSY		-.001	.13	-.0001
Freshman Course		.09	.05	.04
Veteran		-.11	.05	-.04
INS		.26	.31	.01
Age		.01	.01	.03
CJ		.22	.39	.01
SPAN		-.44	.25	-.03
MK		.12	.29	.01
SOC		-.06	.15	-.01
Female		-.04	.04	-.02
GER		-.33	.18	-.03
FR		-.30	.15	-.03
BED		.21	.49	.01
IS		-.23	.11	-.05
MATH		-.19	.10	-.08
SPCH		-.32	.24	-.02
Minority		-.02	.05	-.01
JOUR		-.52	.59	-.01
AC		-.17	.14	-.02
PHIL		-.15	.14	-.02
GEOL		-.16	.17	-.01
GEOG		-.16	.19	-.01
BL		-.16	.27	-.01
SAT--Verbal		.0002	.0003	.01
Hours Transferred		-.0003	.001	-.01
Transfer-GPA Indicator		.01	.02	.01
UL		-.24	.84	-.004
Missing Data--H.S. GPA		.03	.06	.01
Missing Data--SAT Verbal		-.03	.06	-.01
Hours Attempted		.0001	.0004	.004
Missing Data--Age		-.01	.08	-.003
High School--GPA		-.01	.05	-.002
SAT--Math		-.00004	.0004	-.003
Constant		.03		

R^2 = .45

R^2(Adjusted) = .44

Standard Error of Estimate = .83

Number of Majors = 144

HEGIS Code: 1701

AN ANALYSIS OF TABLE 37, CHEMISTRY MAJORS

The adjusted R^2 was .49. The highlights may be summarized as follows:

- Although there was a considerable increase in the estimator from 1971 to 1972 (200% or .14 of a letter grade), since 1972 the grading trend has been rather stable.

- On the average, Chemistry majors performed worse in the following course areas: HIST (-.56); POLS (-.56); BIO (-.39); PHYS (-.32 [illegible]ER (-.63); and PHIL (-.50).

- Course areas in which Chemistry majors attained notable positive estimators are. EC (.35); SOC (.29); ECI (.58); and MK (.40).

- Even when controlling for other factors, the estimator (-.18) of the Minority variable had a fairly strong negative impact for Chemistry majors.

- There was no significant difference in the performance of females when controlling for all other factors.

- The variable Age (.02) had a significant positive impact.

TABLE 37

REGRESSAND: GRADES IN ALL COURSES FOR CHEMISTRY MAJORS

Sample Mean = 2.83 S.D. = 1.11 N = 1782

Regressors		Estimator	Standard Error of Estimator	β
Year of Course:	75	.36	.15	.15
	74	.29	.14	.12
	73	.30	.14	.10
	72	.26	.15	.08
	71	.12	.15	.03
GPA		.95	.03	.66
HIST		-.56	.11	-.11
Hours Attempted		.001	.0006	.05
BIO		-.39	.11	-.08
POLS		-.56	.14	-.08
Freshman Course		.13	.09	.06
PHYS		-.32	.11	-.07
GER		-.63	.22	-.05
EC		.35	.21	.03
PHIL		-.50	.19	-.05
SOC		.29	.20	.03
Age		.02	.01	.07
Veteran		-.15	.08	-.05
ART		-.65	.34	-.03
MATH		-.20	.09	-.06
ENG		-.20	.10	-.05
CHEM		-.12	.08	-.05
AC		-.30	.20	-.03
Minority		-.18	.08	-.06
Missing Data--Age		.27	.13	.06
ECI		.58	.42	.02
FR		-.20	.21	-.02
DM		-.32	.37	-.02
Hours Transferred		-.0007	.001	-.02
MK		.40	.41	.02
BL		.33	.34	.02
Junior Course		-.08	.09	-.03
FI		-.38	.57	-.01
FED		.31	.35	.02
SAT--Math		-.0003	.0004	-.02
Missing Data--H.S. GPA		-.10	.08	-.04
Transfer-GPA Indicator		.02	.02	.03
SPAN		.38	.57	.01
CJ		-.32	.57	-.01
Missing Data--SAT Math		.05	.08	.02
GEOL		-.16	.41	-.007
MGT		.15	.37	.007
MUS		.08	.17	.01
SPCH		.10	.27	.01
IS		.05	.14	.01
Sophomore Course		-.03	.09	-.01
RE		.07	.26	.005
JOUR		-.04	.30	-.003
GEOG		.07	.57	.002
SAT--Verbal		.0001	.0003	.004
Female		-.008	.06	-.003
Constant		-.39		

R^2 = .50

R^2(Adjusted) = .49

Standard Error of Estimate = .80

Number of Majors = 72

HEGIS Code: 1905

AN ANALYSIS OF TABLE 38, GEOLOGY MAJORS

The adjusted R^2 was .35. The highlights may be summarized as follows:

- A continued upward trend was observed between 1971 and 1975, as the estimator increased by 54%, from .57 in 1971 to .88 in 1975, which is equivalent to a .31 grading inflationary factor on a letter grade.
- On the average, Geology majors performed better in the following course areas: GEOL (.26); BED (.83); and PSY (.45).
- Geology majors on the average performed worse in the following course areas: MATH (-.40); ART (-.74); CHEM (-.49); GER (-.89); HIST (-.32); and PHYS (-.53).
- Variables having notably positive impact on Geology majors are: Freshman Course (.22); Hours Attempted (.002); and Hours Transferred (.003).
- The variable Transfer-GPA Indicator (-.10) had a negative impact on Geology majors.

TABLE 38

REGRESSAND: GRADES IN ALL COURSES FOR GEOLOGY MAJORS

Sample Mean = 2.79   S.D. = .97   N = 1081

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.88	.19	.43
	74	.74	.19	.35
	73	.63	.19	.25
	72	.60	.19	.20
	71	.57	.21	.12
GPA		.98	.06	.49
GEOL		.26	.10	.12
Transfer-GPA Indicator		-.10	.04	-.12
Missing Data--Math		.09	.11	.04
MATH		-.40	.12	-.14
ART		-.74	.22	-.09
CHEM		-.49	.14	-.13
GER		-.89	.35	-.07
PHIL		-.33	.19	-.05
BED		.83	.34	.06
PSY		.45	.22	.06
Freshman Course		.22	.11	.11
HIST		-.32	.14	-.07
PHYS		-.53	.20	-.07
Hours Attempted		.002	.001	.12
Hours Transferred		.003	.001	.11
CJ		.78	.41	.05
Junior Course		-.13	.10	-.05
MUS		.29	.20	.04
BL		-1.22	.80	-.04
Age		-.02	.02	-.06
GEOG		.21	.18	.04
Missing Data--H.S. GPA		.13	.11	.07
SOC		.28	.29	.03
RE		.66	.57	.03
SPAN		.39	.41	.02
SPCH		.42	.47	.02
IS		-.30	.27	-.03
MK		-.84	.80	-.03
ECI		-.75	.80	-.02
AC		-.34	.37	-.02
POLS		-.13	.17	-.02
High School--GPA		.06	.08	.02
BIO		-.16	.24	-.02
JOUR		-.27	.39	-.02
IM		-.17	.25	-.02
Minority		-.08	.12	-.02
Veteran		-.07	.11	-.02
EC		-.18	.30	-.02
SAT--Verbal		.0003	.0004	.02
SAT--Math		-.0002	.0005	-.01
FED		.25	.80	.01
Sophomore Course		.03	.11	.01
Female		-.01	.06	-.01
MGT		.10	.57	.005
ENG		-.02	.12	-.01
Constant		-.74		

R^2 = .38

R^2(Adjusted) = .35

Standard Error of Estimate = .79

Number of Majors = 51

HEGIS Code: 1914

AN ANALYSIS OF TABLE 39, PHYSICS MAJORS

The adjusted R^2 was .40. The highlights may be summarized as follows:

- * There was a strong upward trend between 1971 and 1972, as the estimator increased from -.27 in 1971 to .17 in 1972; this is equivalent to .43 of a letter grade increase in a one year period! The estimator declined a bit from 1972 to 1973, but again reverted to an upward trend between 1973 and 1974, at which point it remained relatively stable through 1975. The results over the period from 1971 to 1975 was an increase in .43 of a letter grade.

- * On the average, Physics majors do better in the following course areas: MGT (.42); and HPRS (.41). (Neither course area was significant).

- * Physics majors on the average performed worse in the following course areas: MATH (-.56); FR (-1.67); CHEM (-.53); HIST (-.69); and SPAN (-.79).

- * The variable Age (-.05) had a significant negative impact, indicating that older students did not do as well as younger students.

TABLE 39

REGRESSAND: GRADES IN ALL COURSES FOR PHYSICS MAJORS

Sample Mean = 2.82 S.D. = 1.04 N = 397

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.15	.38	.07
	74	.16	.38	.07
	73	.07	.38	.02
	72	.17	.37	.05
	71	-.27	.38	-.07
GPA		.97	.13	.58
GEOL		-.02	.40	-.003
MATH		-.56	.25	-.21
SAT--Verbal		.002	.002	.17
FR		-1.67	.85	-.08
Age		-.05	.02	-.26
Missing Data--SAT Math		.73	.58	.35
CHEM		-.53	.25	-.18
HIST		-.69	.29	-.14
SPAN		-.79	.56	-.07
MGT		.42	.65	.03
HPRS		.41	.85	.02
Sophomore Course		-.11	.11	-.05
ART		-.83	.65	-.06
SOC		.10	.55	.01
BL		.44	.86	.02
DM		.44	.86	.02
RE		.44	.86	.02
SAT--Math		.001	.004	.05
Hours Transferred		.002	.003	.09
BED		.28	.66	.02
PSY		-.62	.36	-.09
POLS		-.63	.37	-.09
FED		-.95	.86	-.05
SPCH		-.18	.48	-.02
BIO		-.51	.31	-.10
Female		-.08	.20	-.03
PHIL		-.53	.34	-.08
PHYS		-.40	.24	-.17
ENG		-.41	.27	-.10
AC		-.63	.53	-.05
IS		-.54	.44	-.06
GEOG		-.68	.87	-.03
MUS		-.30	.33	-.05
MK		-.56	.86	-.03
Transfer-GPA Indicator		-.09	.12	-.11
Minority		-.29	.31	-.07
Missing Data--H.S. GPA		.22	.25	.09
Hours Attempted		-.001	.001	-.05
High School--GPA		-.21	.34	-.08
Veteran		-.11	.23	-.04
EC		-.15	.48	-.01
Senior Course		.04	.15	.01
Constant		.60		

R^2 = .47

R^2(Adjusted) = .40

Standard Error of Estimate = .81

Number of Majors = 22

HEGIS Code: 1902

AN ANALYSIS OF TABLE 40, PSYCHOLOGY MAJORS

The adjusted R^2 was .38. The highlights may be summarized as follows:

* During the period from 1971 to 1975, the grading trend for Psychology majors has experienced only a slight inflationary effect; moreover, there was a uniform trend between 1971 and 1972, and the yearly increase for the estimator from 1972 to 1975 was 59% or .08 of a letter grade. However, this slight upward trend seems to be approaching a peak since the trend is increasing at a decreasing rate.

* Psychology majors on the average performed better in Education and Urban Life courses. Notable positive weights included FED (.51); ECI (.47); HPRS (.42); and UL (.27).

* Psychology majors on the average performed worse in courses in the following areas: BIO (-.50); HIST (-.43); INS (-.51); GER (-.29); POLS (-.25); and IS (-.25).

* When controlling for all other factors, the Female and Minority estimators, -.01 and -.05 respectively, have no significant impact.

* The variable Senior Course (.10) had a positive impact, while Transfer-GPA Indicator (-.03) had a negative impact.

REGRESSAND: GRADES IN ALL COURSES FOR PSYCHOLOGY MAJORS

Sample Mean = 2.89   S.D. = 1.06   N = 10187

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.35	.07	.15
	74	.30	.07	.13
	73	.23	.07	.09
	72	.10	.07	.03
	71	.10	.07	.03
GPA		.97	.02	.56
PSY		.20	.04	.08
Freshman Course		.01	.03	.01
BIO		-.50	.06	-.08
HIST		-.43	.05	-.09
FED		.51	.08	.05
Transfer-GPA Indicator		-.03	.01	-.04
Senior Course		.10	.03	.03
MUS		.23	.07	.03
SOC		.11	.05	.03
ECI		.47	.12	.03
HPRS		.42	.19	.02
MATH		-.23	.05	-.05
POLS		-.25	.06	-.04
GER		-.29	.07	-.04
ART		-.31	.09	-.03
CHEM		-.22	.06	-.03
FR		-.18	.05	-.03
PHYS		-.26	.09	-.03
GEOG		-.24	.08	-.03
PHIL		-.14	.05	-.03
Hours Attempted		.0003	.0002	.01
INS		-.51	.22	-.02
Missing Data--SAT Math		.10	.16	.05
GEOL		-.19	.08	-.02
HED		.30	.15	.02
IS		-.25	.13	-.02
AC		-.22	.10	-.02
SAT--Math		.0002	.0001	.01
MK		.33	.18	.01
Hours Transferred		-.004	.0003	-.02
MGT		.14	.09	.01
Veteran		-.04	.03	-.01
Minority		-.05	.03	-.01
UL		.27	.19	.02
NURS		.13	.15	.01
Age		-.002	.002	-.01
BL		.09	.14	.005
ENG		-.04	.04	-.01
CJ		-.08	.11	-.01
Missing Data--H.S. GPA		-.02	.03	-.01
SPAN		-.04	.07	-.01
SPE		.09	.23	.003
SPCH		.05	.13	.003
RE		.04	.14	.002
DM		-.05	.16	-.002
Female		-.01	.02	-.003
EC		-.02	.09	-.002
Missing Data--SAT Verbal		-.04	.16	-.02
Missing Data--Age		-.01	.05	-.002
JOUR		-.03	.17	-.002
Sophomore Course		.01	.03	.002
High School--GPA		.004	.02	.001
SAT--Verbal		.00002	.0001	.001
Constant		-.19		

R = .39

R (Adjusted) = .38

Standard Error of Estimate = .83

Number of Majors = 271

HEGIS Code: 2001

AN ANALYSIS OF TABLE 41, ANTHROPOLOGY MAJORS

The adjusted R^2 was .36. The highlights may be summarized as follows:

- There was a continual upward sloping grading trend from 1971 to 1975. The estimator increased from -.08 in 1971 to .55 in 1975. This resulted in a .63 inflationary factor on a letter grade during the period from 1971 to 1975.

- Anthropology majors on the average performed better in the course area of Music (.32).

- On the average, Anthropology majors performed worse in the following course areas: HIST (-.36); BIO (-.53); GER (-.59); PHYS (-.93); CHEM (-.66); MATH (-.32); ART (-.52); BED (-.95); and UL (-1.67).

- The variable Transfer-GPA Indicator (-.05) had a negative impact.

TABLE 41

REGRESSAND: GRADES IN ALL COURSES FOR ANTHROPOLOGY MAJORS

Sample Mean = 2.93 S.D. = 1.00 N = 2152

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.55	.12	.24
74	.38	.12	.16
73	.34	.12	.13
72	.20	.12	.07
71	-.08	.12	-.02
GPA	.92	.04	.52
Transfer-GPA Indicator	-.05	.02	-.07
HIST	-.36	.07	-.09
BIO	-.53	.11	-.08
GER	-.59	.14	-.08
MUS	.32	.11	.06
PHYS	-.93	.24	-.07
CHEM	-.66	.17	-.07
MATH	-.32	.09	-.07
ART	-.52	.15	-.06
FR	-.36	.11	-.06
POLS	-.30	.11	-.05
Missing Data--SAT Math	.06	.06	.03
HED	-.95	.36	-.05
Hours Attempted	.001	.001	.04
UL	-1.67	.80	-.04
SPAN	-.15	.09	-.03
HPRS	.71	.40	.03
DM	-.62	.36	-.03
Minority	.14	.10	.03
SAT--Math	.0004	.0003	.03
Senior Course	.07	.05	.03
GEOG	-.14	.12	-.02
SOC	.10	.10	.02
PSY	.10	.09	.02
Freshman Course	.04	.05	.02
ECI	.30	.33	.02
FED	.16	.20	.01
Hours Transferred	-.001	.001	-.03
High School--GPA	.05	.07	.02
Missing Data--Age	-.09	.10	-.02
SAT--Verbal	-.0002	.0003	-.01
CJ	-.16	.26	-.01
MGT	-.28	.46	-.01
ENG	-.04	.07	-.01
PHIL	-.05	.10	-.01
SPCH	-.15	.27	-.01
SPE	-.17	.46	-.01
Missing Data--H.S. GPA	.03	.08	.01
EC	.05	.18	.005
GEOL	.03	.10	.005
JOUR	.11	.46	.004
Female	.008	.04	.004
MK	.08	.57	.002
Constant	-.33		

R^2 = .38

R^2(Adjusted) = .36

Standard Error of Estimate = .80

Number of Majors = 94

HEGIS Code: 2202

AN ANALYSIS OF TABLE 42, COMMUNITY RELATIONS MAJORS

The adjusted R^2 was .28. The highlights may be summarized as follows:

* With the exception of a slight and brief downward trend from 1972 to 1973, the overall trend from 1971 to 1975 was upward in slope. The estimator increased from .21 in 1971 to .69 or 228%, which is equivalent to .48 of an increase in a letter grade.

* On the average, Community Relations majors did better in the course area of Foundations of Education (.97).

* Community Relations majors performed worse in the following course areas: HIST (-.31); MATH (-.42); SPAN (-1.49). (None of the above weights were significant).

* The variable Freshman Course (-.20) had a negative impact, but was not statistically significant.

TABLE 42

REGRESSAND: GRADES IN ALL COURSES FOR COMMUNITY RELATIONS MAJORS

Sample Mean = 2.65 S.D. = .93 N = 355

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.69	.29	.33
	74	.51	.28	.24
	73	.34	.27	.14
	72	.36	.27	.14
	71	.21	.27	.07
GPA		.79	.28	.37
Freshman Course		-.20	.18	-.09
HIST		-.31	.19	-.10
MATH		-.42	.24	-.10
SPAN		-1.49	.82	-.09
FED		.97	.43	.11
ECI		.73	.38	.10
Hours Transferred		-.004	.004	-.15
BL		.54	.33	.08
SOC		.22	.15	.09
MK		.78	.59	.06
ENG		.30	.21	.08
Veterans		-.15	.20	-.08
PHIL		-.27	.26	-.05
MGT		-.41	.38	-.05
Female		-.02	.23	-.01
BIO		-.77	.82	-.04
BED		.77	.83	.04
MUS		.78	.84	.04
Missing Data--H.S. GPA		.40	.38	.11
Junior Course		.06	.17	.03
GEOL		.29	.49	.03
CHEM		.39	.59	.03
IM		-.29	.60	-.02
JOUR		.26	.36	.04
Age		-.01	.01	-.06
High School--GPA		-.29	.37	-.07
ART		-.22	.42	-.02
CJ		-.12	.32	-.02
GER		-.44	.83	-.03
SAT--Verbal		-.00000	.002	-.0001
UL		.10	.18	.03
Senior Course		-.07	.18	-.04
POLS		.09	.21	.02
SAT--Math		.003	.01	.10
Missing Data--SAT Verbal		-.13	.26	-.06
PSY		.04	.17	.01
SPCH		-.15	.82	-.01
IS		.09	.50	.01
Hours Attempted		-.001	.003	-.04
Missing Data--Age		-.10	.32	-.03
Constant		.23		

$R^2 = .37$

R^2(Adjusted) = .28

Standard Error of Estimate = .79

Number of Majors = 17

HEGIS Code: 2214

AN ANALYSIS OF TABLE 43, CRIMINAL JUSTICE MAJORS

The adjusted R^2 was .32. The highlights may be summarized as follows:

* A continued upward grading trend was observed between 1971 and 1975, as the estimator increased from .05 to .26. The resulting effect was the equivalent of .21 increase in a letter grade.

* On the average, Criminal Justice majors did better in the following course areas: MUS (.27); and ECI (.64). (Neither was statistically significant).

* Criminal Justice majors performed on the average worse in the following course areas: HIST (-.63); BIO (-.97); AC (-.65); CJ (-.20); SOC (-.21); POLS (-.35); and GER (-1.19).

* The following variables had a significant negative weight on Criminal Justice majors: Freshman Course (-.17); Transfer-GPA Indicator (-.03); and Sohpomore Course (-.12).

TABLE 43

REGRESSAND: GRADES IN ALL COURSES FOR CRIMINAL JUSTICE MAJORS

Sample Mean = 2.53 S.D. = .96 N = 8133

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.26	.07	.13
74	.16	.07	.07
73	.12	.07	.05
72	.06	.07	.02
71	.05	.08	.01
GPA	.96	.02	.50
HIST	-.63	.06	-.18
Freshman Course	-.17	.04	-.07
BIO	-.97	.10	-.10
Transfer-GPA Indicator	-.03	.01	-.04
Sophomore Course	-.12	.03	-.05
PSY	-.04	.06	-.01
Hours Transferred	-.001	.0003	-.06
UL	-.09	.06	-.02
AC	-.65	.11	-.06
BL	-.03	.08	-.004
CJ	-.20	.06	-.09
SOC	-.21	.06	-.07
FED	.16	.16	.01
SPCH	.02	.13	.001
MUS	.27	.22	.01
ECI	.64	.36	.02
MATH	-.45	.07	-.09
GEOL	-.52	.08	-.07
PHIL	-.49	.09	-.06
PHYS	-.73	.19	-.04
DM	-.53	.11	-.05
GER	-1.19	.40	-.03
IS	-.67	.17	-.04
HED	.04	.18	.002
POLS	-.35	.06	-.09
Missing Data--SAT Math	.06	.14	.03
ART	-.60	.20	-.03
EC	-.35	.06	-.09
ENG	-.32	.06	-.09
GEOG	-.29	.06	-.06
MK	-.61	.19	-.03
CHEM	-.40	.13	-.03
MGT	-.28	.08	-.04
JOUR	-.35	.13	-.03
INS	-.59	.27	-.02
FR	-.32	.18	-.02
RE	-.31	.22	-.01
SAT--Verbal	.0002	.0002	.02
Hours Attempted	.0002	.0003	.01
High School--GPA	-.02	.02	-.01
Minority	.02	.02	.01
Female	-.03	.02	-.01
Veteran	-.02	.02	-.01
SPE	.60	.79	.01
Senior Course	-.02	.03	-.01
SAT--Math	-.0001	.0002	-.01
Missing Data--Age	-.03	.05	-.01
NURS	.30	.56	.005
HPRS	.13	.33	.004
Missing Data--H.S. GPA	.01	.03	.01
SPAN	-.08	.22	-.003
Missing Data--SAT Verbal	-.03	.14	-.02
Constant	.34		

$R^2 = .32$

R^2(Adjusted) = .32

Standard Error of Estimate = .79

Number of Majors = 386

HEGIS Code: 2214

AN ANALYSIS OF TABLE 44, FINANCIAL SECURITY PROGRAMS MAJORS

- Due to the small number of majors (9), valid statistical conclusions cannot be stated as significant; however, the findings will be presented in order that some notion of causal effect is conveyed.

The adjusted R^2 was .27. The highlights may be summarized as follows:

- An upward sloping grading trend existed between 1971 and 1974. From 1974 to 1975, a slight downward trend was observed. The overall effect was an increase in the estimator from -.06 in 1971 to .13 in 1975, or an increase in .19 of a letter grade.

- There were no course areas in which Financial Security Programs majors had significant positive weights.

- On the average, Financial Security Programs majors performed worse in the following course areas: AC (-2.24); and MATH (-2.15).

- No other variables had statistically significant weights.

TABLE 44

REGRESSAND: GRADES IN ALL COURSES FOR FINANCIAL SECURITY PROGRAM MAJORS

Sample Mean = 2.60 S.D. = .89 N = 170

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.13	.50	.07
	74	.19	.48	.10
	73	.04	.47	.02
	72	-.06	.52	-.02
AC		-2.44	.92	-.42
GPA		.82	.42	.26
MATH		-2.15	.98	-.32
CHEM		1.11	1.22	.10
DM		-1.73	1.02	-.21
BIO		-1.61	.98	-.24
Missing Data--Age		-.24	.70	-.09
ENG		-1.15	.88	-.31
HIST		-.81	.86	-.23
FI		-1.26	1.01	-.15
CJ		-.89	.90	-.15
SOC		-.70	.85	-.21
SAT--Verbal		.001	.002	.07
MGT		-.74	.88	-.17
RE		-.82	.91	-.14
Age		-.005	.03	-.02
BED		.19	1.18	.02
SPCH		.16	1.19	.01
FED		.09	1.17	.01
UL		-.31	.85	-.09
Hours Attempted		.005	.01	.21
Female		.29	.33	.15
GEOG		-.69	.93	-.12
IS		-.59	.93	-.10
INS		-.52	.86	-.16
MK		-.73	1.15	-.06
EC		-.46	.83	-.21
PHIL		-.44	.97	-.05
Freshman Course		.08	.33	.03
Sophomore Course		.05	.24	.02
Veteran		-.08	.35	-.04
POLS		-.39	.84	-.12
BL		-.38	.85	-.12
PSY		-.38	.92	-.07
Constant		.15		

R^2 = .43

R^2(Adjusted) = .27

Standard Error of Estimate = .76

Number of Majors = 9

HEGIS Code: 2214

AN ANALYSIS OF TABLE 45, GEOGRAPHY MAJORS

The adjusted R^2 was .28. The highlights may be summarized as follows:

- * The estimator increased each year from 1971 to 1973. There was a slight decrease in the estimator from 1973 to 1974; but the period from 1974 to 1975 represented a reversal of the estimator to an upward trend. As a result of the above described trend between 1971 and 1975, there was an increase of .28 of a letter grade.
- * On the average, Geography majors did better in the following course areas: GEOG (.41); MUS (.61); SPCH (.60); and ECI (.60).
- * Geography majors on the average performed worse in the following course areas: MATH (-.63); HIST (-.34); and AC (-1.20).
- * No other variables had a statistically significant impact

TABLE 45

REGRESSAND: GRADES IN ALL COURSES FOR GEOGRAPHY MAJORS

Sample Mean = 2.84   S.D. = .98   N = 769

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.46	.22	.22
	74	.34	.22	.15
	73	.39	.22	.15
	72	.37	.22	.12
	71	.18	.22	.05
GPA		.92	.10	.41
GEOG		.41	.12	.18
MATH		-.63	.17	-.14
MUS		.61	.18	.13
HIST		-.34	.15	-.09
AC		-1.20	.50	-.08
SPCH		.60	.31	.06
GEOL		.21	.17	.05
ECI		.60	.32	.07
HPRS		.69	.44	.05
PHYS		-.62	.40	-.05
ART		-.42	.24	-.06
UL		1.43	.86	.05
Transfer-GPA Indicator		-.06	.05	-.08
RED		-.56	.37	-.05
FR		-.31	.21	-.05
POLS		-.29	.21	-.05
FED		.70	.51	.04
EC		-.21	.28	-.03
MK		-.84	.85	-.03
Minority		-.18	.23	-.03
BIO		.42	.45	.03
Junior Course		.08	.11	.03
ENG		.07	.15	.02
JOUR		-.23	.30	.03
Hours Transferred		-.001	.002	-.04
Sophomore Course		-.01	.13	-.005
IS		.08	.29	.009
CJ		.19	.61	.01
Missing Data--H.S. GPA		.17	.16	.08
Missing Data--SAT Math		-.13	.13	-.06
High School--GPA		.02	.05	.02
SOC		-.09	.20	-.02
PSY		-.08	.22	-.01
PHIL		-.07	.25	-.01
Freshman Course		.03	.11	.01
SPAN		-.04	.18	-.01
SAT--Verbal		-.0002	.001	-.02
GER		-.10	.50	-.006
Age		-.003	.01	-.01
RE		.06	.32	.01
INS		.15	.86	.01
Hours Attempted		.0002	.001	.01
CHEM		-.04	.29	-.01
SAT--Math		.0001	.001	.01
Constant		-.10		

R^2 = .32

R^2(Adjusted) = .28

Standard Error of Estimate = .84

Number of Majors = 31

HEGIS Code: 2206

AN ANALYSIS OF TABLE 46, HISTORY MAJORS

The adjusted R^2 was .41. The highlights may be summarized as follows:

- There was a continued upward grading trend from 1971 to 1975, as the estimator increased from .03 in 1971 to .25 in 1975. This trend resulted in a .22 increase in a letter grade during the period from 1971 to 1975.
- On the average, History majors performed better in the course area of Education. The following weights were found: FED (.30); ECI (.11); HPRS (.24); and BED (.05).
- History majors on the average performed worse in the following course areas: GER (-.71); AC (-1.12); DM (-1.16); BIO (-.72); and MATH (-.50).
- The variables Sophomore Course (-.12) and Transfer-GPA Indicator (-.02) had significant negative impact on History majors.

TABLE 46

REGRESSAND: GRADES IN ALL COURSES FOR HISTORY MAJORS

Sample Mean = 2.70 S.D. = 1.07 N = 3441

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.25	.10	.10
74	.16	.10	.07
73	.11	.10	.04
72	.10	.10	.03
71	.03	.10	.01
GPA	.99	.03	.60
GER	-.71	.11	-.10
AC	-1.12	.21	-.07
DM	-1.16	.20	-.08
BIO	-.72	.12	-.08
FED	.30	.13	.03
MATH	-.50	.09	-.09
Sophomore Course	-.12	.04	-.05
CHEM	-.54	.14	-.05
SPAN	-.39	.09	-.06
HIST	-.22	.05	-.09
ECI	.11	.12	.01
MUS	.04	.10	.01
SPCH	.24	.20	.02
SOC	-.01	.09	-.001
SPE	-1.26	.59	-.03
Transfer-GPA Indicator	-.02	.01	-.02
GEOL	-.33	.12	-.04
IS	-.56	.25	-.03
PHIL	-.26	.09	-.04
MK	-.45	.23	-.03
FR	-.23	.09	-.04
GEOG	-.24	.10	-.04
PHYS	-.41	.23	-.02
Age	.003	.003	.01
UL	-.59	.34	-.02
HPRS	.24	.30	.01
JOUR	-.30	.18	-.02
POLS	-.17	.08	-.03
ENG	-.15	.07	-.04
EC	-.19	.11	-.03
FI	-.94	.82	-.02
PSY	-.13	.10	-.02
RE	-.27	.25	-.01
ART	-.14	.11	-.02
CJ	-.15	.15	-.01
Missing Data--Age	.06	.07	.01
Female	.03	.03	.01
Veteran	.03	.04	.01
Minority	.04	.06	.01
MGT	.11	.21	.01
SAT--Math	.0002	.0003	.01
SAT--Verbal	-.0002	.0002	-.01
Hours Transferred	-.0004	.001	-.01
Junior Course	-.01	.04	-.01
Missing Data--H.S. GPA	.02	.04	.01
ML	-.07	.18	-.01
High School--GPA	-.01	.03	-.01
BED	.05	.20	.004
Hours Attempted	-.0001	.0004	-.003
Senior Course	.01	.05	.003
INS	.06	.48	.002
Constant	.05		

R^2 = .42

R^2(Adjusted) = .41

Standard Error of Estimate = .82

Number of Majors = 162

HEGIS Code: 2205

AN ANALYSIS OF TABLE 47, HOUSING ADMINISTRATION MAJORS

- Due to the small number of majors (4), valid statistical conclusions cannot be stated as significant; however, the findings will be presented in order that some notion of causal effect is conveyed.

The adjusted R^2 was .42. The highlights may be summarized as follows:

- The estimator decreased from 1971 to 1972, but at that point an upward trend set in through 1975. In 1971 the estimator was 1.07, and in 1975 it was 1.49, which is equivalent to an an increase of .42 of a letter grade during the entire period.

- There were no course areas in which Housing Administration majors registered positive impact.

- On the average, Housing Administration majors performed worse in the following course areas: IS (-2.51); MATH (-1.46); GEOG (-.89); and AC (-1.41).

- The variable Freshman Course had a negative impact (-.13), while Sophomore Course (.23) had a positive impact.

TABLE 47

REGRESSAND: GRADES IN ALL COURSES FOR HOUSING ADMINISTRATION MAJORS

Sample Mean = 2.88 S.D. = .92 N = 128

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	1.49	.80	.66
	74	1.26	.80	.54
	73	1.05	.79	.47
	72	1.03	.78	.48
	71	1.07	.76	.39
GPA		1.04	.23	.44
IS		-2.51	.71	-.34
MATH		-1.46	.55	-.28
GEOG		-.89	.49	-.26
DM		-1.08	.52	-.23
AC		-1.41	.70	-.19
ENG		-.86	.49	-.26
GEOL		-.92	.68	-.12
HIST		-.60	.47	-.19
RE		-.19	.51	-.07
POLS		-.08	.51	-.02
Sophomore Course		.23	.28	.10
UL		-.26	.51	-.08
EC		-.66	.51	-.21
SAT--Verbal		.001	.001	.06
MGT		-.71	.59	-.13
SOC		-.54	.49	-.19
BL		-.62	.61	-.12
Freshman Course		-.13	.28	-.06
JOUR		-.57	.86	-.05
SPCH		-.40	.82	-.04
PHIL		-.36	.64	-.06
PSY		-.36	.64	-.06
Junior Course		.04	.20	.02
Constant		-1.06		

R^2 = .55

R^2(Adjusted) = .42

Standard Error of Estimate = .71

Number of Majors = 4

HEGIS Code: 2214

AN ANALYSIS OF TABLE 48, LAND DEVELOPMENT MAJORS

The adjusted R^2 was .40. The highlights may be summarized as follows:

- The trend was fairly stable between 1971 and 1973, as the estimator increased slightly from 1971 to 1972 and decreased slightly from 1972 to 1973. However, this fairly stable trend ceased during the period from 1973 to 1974, as the estimator increased by 164%. The estimator was relatively constant between 1974 and 1975. The effect of the above described grading trend from 1971 to 1975 was an increase of .22 of a letter grade.

- On the average, Land Development majors performed better in the following course areas: RE (.36); FI (1.81); UL (.28); and GEOG (.25).

- Land Development majors, on the average, performed worse in the following course areas: HIST (-.23); DM (-.38); and BIO (-1.12).

- The variables Hours Transferred (-.002) and Missing Data--SAT Verbal (-.03) had negative impacts on Land Development majors.

TABLE 48

REGRESSAND: GRADES IN ALL COURSES FOR LAND DEVELOPMENT MAJORS

Sample Mean = 2.49 S.D. = .98 N = 1472

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.36	.16	.16
	74	.37	.16	.17
	73	.14	.06	.16
	72	.17	.16	.05
	71	.14	.16	.04
GPA		1.08	.05	.61
HIST		-.23	.12	-.07
RE		.36	.12	.13
DM		-.38	.18	-.05
Hours Transferred		-.002	.001	-.10
AC		-.38	.21	-.04
FI		1.81	.77	.05
UL		.28	.12	.08
GEOG		.25	.11	.08
BIO		-1.12	.55	-.04
Missing Data--H.S. GPA		.14	.11	.06
Veteran		.10	.05	.05
Transfer-GPA Indicator		-.04	.03	-.06
PHIL		-.18	.20	-.02
SPAN		.93	.55	.03
ART		-.42	.45	.02
IS		-.23	.25	-.02
JOUR		.50	.40	.03
Female		-.08	.08	-.02
EC		.004	.12	.001
Freshman Course		-.04	.07	-.02
BL		-.01	.16	-.001
Junior Course		.04	.06	.02
ENG		.15	.12	.04
PSY		.18	.17	.03
SAT--Verbal		-.0004	.0005	-.02
MATH		.15	.15	.03
MGT		.14	.16	.03
POLS		.11	.12	.03
SOC		.08	.12	.02
SAT--Math		.0002	.0004	.01
CJ		.09	.17	.01
INS		.21	.46	.01
Missing Data--SAT Verbal		-.03	.09	-.01
SPCH		.11	.33	.01
High School--GPA		.02	.08	.01
Minority		-.04	.10	-.01
Hours Attempted		-.0002	.001	-.01
Age		-.002	.01	-.01
Missing Data--Age		.03	.22	.003
MUS		-.06	.40	-.003
Constant		.46		

R^2 = .41

R^2(Adjusted) = .40

Standard Error of Estimate = .76

Number of Majors = 66

HEGIS Code: 48

AN ANALYSIS OF TABLE 49, POLITICAL SCIENCE MAJORS

The adjusted R^2 was .39. The highlights may be summarized as follows:

- The estimator was constant between 1971 and 1972, increased by 137% from 1972 to 1973, and again was rather stable from 1973, to 1975, as the increase was about 45% over the two year period. From 1971 to 1975 the estimator increased from -.08 to .16, which is equivalent to an increase of .24 of a letter grade.
- On the average, Political Science majors performed better in the following course areas: HPRS (.71); and FED (.12).
- Political Science majors on the average performed worse in the following course areas: FI (-1.01); BIO (-.96); GER (-.88); DM (-.93); AC (-.76); and HIST (-.42).
- The variables Sophomore Course (-.09) and Freshman Course (-.09) had negative impacts.

TABLE 49

REGRESSAND: GRADES IN ALL COURSES FOR POLITICAL SCIENCE MAJORS

Sample Mean = 2.73 S.D. = 1.03 N = 3901

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.16	.11	.07
74	.13	.11	.06
73	.11	.11	.04
72	-.08	.11	-.02
71	-.08	.11	-.02
GPA	1.00	.03	.59
BIO	-.96	.13	-.11
GER	-.88	.13	-.10
Freshman Course	-.09	.05	-.04
DM	-.93	.16	-.08
AC	-.76	.16	-.06
HIST	-.42	.07	-.13
Sophomore Course	-.09	.04	-.04
Hours Transferred	-.001	.001	-.04
FR	-.44	.09	-.08
PHIL	-.38	.09	-.07
MATH	-.41	.09	-.08
CHEM	-.71	.19	-.05
GEOL	-.46	.11	-.06
SPAN	-.35	.08	-.07
HPRS	.71	.41	.02
FI	-1.01	.47	-.03
GEOG	-.32	.10	-.05
FED	.12	.18	.01
RE	-.62	.29	-.03
IS	-.45	.22	-.03
ART	-.34	.15	-.03
ENG	-.21	.07	-.06
POLS	-.19	.06	-.08
EC	-.24	.10	-.04
INS	-.44	.25	-.02
PHYS	-.49	.31	-.02
JOUR	-.31	.18	-.02
Missing Data--SAT Verbal	.02	.04	.01
CJ	-.21	.13	-.02
MK	-.35	.23	-.02
Female	-.05	.04	-.02
Minority	.06	.05	.02
Missing Data--Age	-.10	.10	-.01
Veteran	-.03	.04	-.01
Senior Course	.03	.04	.01
SPCH	-.16	.12	-.02
SOC	-.12	.09	-.02
PSY	-.10	.10	-.02
MUS	-.11	.11	-.01
Transfer-GPA Indicator	-.01	.01	-.01
Missing Data--H.S. GPA	-.02	.04	-.01
Hours Attempted	.0001	.0004	.01
High School--GPA	-.01	.02	-.01
BL	-.07	.14	-.01
BED	-.11	.28	-.01
MGT	-.07	.18	-.01
UL	-.22	.81	-.003
Age	.0004	.003	.002
SAT--Verbal	.0001	.0002	.004
SAT--Math	-.0001	.0002	-.004
Constant	.27		

R^2 = .40

R^2(Adjusted) = .39

Standard Error of Estimate = .81

Number of Majors = 191

HEGIS Code: 2207

AN ANALYSIS OF TABLE 50, SOCIAL WELFARE MAJORS

The adjusted R^2 was .35. The highlights may be summarized as follows:

- A continued upward trend was observed from 1971 to 1975, as the estimator increased from 0.21 in 1971 to .30 in 1975. The result was a letter grade inflated by a factor of .51.

- Social Welfare majors on the average did better in the following course areas: UL (.36); SPCH (.48); and FED (.31).

- On the average, Social Welfare majors performed worse in the following course areas: BIO (-.58); HIST (-.30); FR (-.86); GEOG (-.27); FI (-2.24); MATH (-.28); and SPAN (-.63).

- The variable Junior Course (.15) had a positive impact, while Hours Transferred (-.002) had a negative impact.

TABLE 50

REGRESSAND: GRADES IN ALL COURSES FOR SOCIAL WELFARE MAJORS

Sample Mean = 2.65 S.D. = 1.01 N = 2283

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.30	.13	.14
74	.16	.13	.07
73	.04	.13	.02
72	-.01	.13	-.004
71	-.21	.13	-.06
GPA	.89	.04	.46
Junior Course	.15	.06	.07
UL	.36	.11	.12
Hours Transferred	-.002	.001	-.08
Freshman Course	.01	.07	.005
BIO	-.58	.15	-.08
HIST	-.30	.11	-.08
FR	-.86	.30	-.05
GEOG	-.27	.12	-.06
FI	-2.24	.83	-.05
Senior Course	.04	.07	.01
SAT--Verbal	.0004	.0003	.03
SPCH	.48	.24	.04
PSY	.18	.11	.06
SOC	.13	.11	.05
FED	.31	.16	.04
Veteran	-.09	.06	-.03
NURS	.81	.43	.03
CJ	.10	.13	.02
Transfer-GPA Indicator	-.03	.02	-.04
BL	.26	.22	.02
MATH	-.28	.13	-.05
SPAN	-.63	.30	-.04
DM	-.49	.26	-.03
GEOL	-.30	.16	-.04
Hours Attempted	.001	.0005	.03
CHEM	-.41	.24	-.03
MK	-.76	.59	-.02
Missing Data--H.S. GPA	.05	.07	.02
MUS	.25	.29	.02
ART	.22	.30	.01
IS	-.52	.48	-.02
INS	.21	.31	.01
SPE	.41	.59	.01
Minority	-.02	.05	-.01
AC	-.26	.33	-.01
SAT--Math	.0001	.0003	.01
HPRS	.26	.83	.01
PHIL	-.12	.15	-.02
MGT	.01	.23	.001
Age	-.002	.004	-.01
High School--GPA	-.02	.04	-.01
Missing Data--SAT Math	.02	.05	.01
JOUR	-.18	.33	-.01
BED	.15	.83	.003
ENG	-.08	.11	-.02
POLS	-.08	.11	-.02
EC	-.08	.12	-.02
Female	-.01	.05	-.01
Constant	-.05		

R^2 = .36

R^2(Adjusted) = .35

Standard Error of Estimate = .82

Number of Majors = 111

HEGIS Code: 2214

AN ANALYSIS OF TABLE 51, SOCIOLOGY MAJORS

The adjusted R^2 was .46. The highlights may be summarized as follows:

- The estimator was rather stable between 1971 and 1972. From 1972 to 1975 the trend was upward sloping. The estimator increased from .02 in 1971 to .20 in 1975, which is equivalent to an increase in .18 of a letter grade.
- On the average, Sociology majors did better in the following course areas: ECI (.38); HPRS (.36); and MGT (.16).
- Sociology majors on the average did worse in the following course areas: BIO (-.82); HIST (-.59); MATH (-.48); GER (-.66); DM (-.85); FR (-.33); and IS (-1.69).
- Transfer-GPA Indicator (-.03) had a negative impact.
- Even when controlling for other factors, minorities tend to do better in sociology, as the Minority variable (.09) had a significant positive impact.

TABLE 51

REGRESSAND: GRADES IN ALL COURSES FOR SOCIOLOGY MAJORS

Sample Mean = 2.67 S.D. = 1.06 N = 3408

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.20	.10	.08
	74	.15	.10	.06
	73	.06	.10	.02
	72	-.003	.11	-.001
	71	.02	.11	.01
GPA		.97	.03	.62
Freshman Course		-.07	.06	-.03
BIO		-.82	.11	-.11
HIST		-.59	.08	-.13
MATH		-.48	.09	-.10
GER		-.66	.14	-.07
Hours Attempted		.001	.0004	.03
DM		-.85	.20	-.06
FR		-.33	.09	-.06
IS		-1.69	.46	-.05
JOUR		-.81	.26	-.04
PHYS		-.96	.30	-.04
Minority		.09	.04	.03
CHEM		-.62	.21	-.04
POLS		-.28	.10	-.05
Transfer-GPA Indicator		-.03	.01	-.03
PHIL		-.26	.10	-.04
ECI		.38	.20	.03
Junior Course		.07	.05	.03
GEOG		-.22	.10	-.03
HPRS		.36	.25	.02
PSY		-.002	.08	-.001
MGT		.16	.17	.01
UL		-.43	.23	-.02
Female		.06	.04	.03
SPCH		.18	.19	.01
FI		-.48	.33	-.02
ENG		-.14	.07	-.04
INS		.57	.55	.01
GEOL		-.19	.12	-.02
SOC		-.09	.07	-.04
AC		-.29	.20	-.02
RE		-.30	.21	-.02
EC		-.18	.13	-.02
Missing Data--Age		-.10	.08	-.02
Hours Transferred		-.001	.0005	-.02
Age		.002	.003	.01
CJ		-.09	.14	-.01
Veteran		.04	.06	.01
NURS		.19	.30	.01
SPAN		-.04	.09	-.01
Sophomore Course		.03	.05	.01
Missing Data--H.S. GPA		.03	.05	.01
SAT--Verbal		.00004	.0002	.003
FED		.04	.14	.004
Missing Data--SAT Math		-.01	.04	-.01
HED		-.05	.20	-.003
MK		-.07	.35	-.003
ART		-.02	.15	-.002
SAT--Math		.00004	.0003	.002
BL		.04	.35	.002
MUS		.01	.11	.002
Constant		.001		

R^2 = .47

R^2(Adjusted) = .46

Standard Error of Estimate = .78

Number of Majors = 170

HEGIS Code: 2208

AN ANALYSIS OF TABLE 52, URBAN ADMINISTRATION MAJORS

The adjusted R^2 was .37. The highlights may be summarized as follows:

- * A continued upward trend was observed from 1971 to 1975, as the estimator increased from .48 to .82 or by .34 of a letter grade.
- * On the average, Urban Administration majors did better in the following course areas: HPRS (.59); MUS (.40); and BED (.27).
- * Urban Administration majors did worse in the following course areas: AC (-.73); DM (-.79); SPAN (-1.29); HIST (-.47); and BIO (-.73).
- * The variable, Transfer-GPA Indicator (-.05), had a significant negative impact.

TABLE 52

REGRESSAND: GRADES IN ALL COURSES FOR URBAN ADMINSTRATION MAJORS

Sample Mean = 2.67   S.D. = 1.00   N = 1635

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.82	.17	.38
74	.78	.17	.36
73	.65	.17	.26
72	.60	.17	.20
71	.48	.18	.11
GPA	.88	.04	.53
MGT	.002	.15	.001
Transfer-GPA Indicator	-.05	.02	-.07
AC	-.73	.20	-.10
IM	-.79	.20	-.10
SPAN	-1.29	.35	-.08
HIST	-.47	.15	-.13
BIO	-.73	.23	-.07
SAT--Math	.001	.001	.05
MATH	-.41	.16	-.08
IS	-.65	.23	-.07
POLS	-.32	.15	-.11
ART	-.97	.42	-.05
CJ	-.38	.18	-.06
HPRS	.59	.48	.03
GEOL	-.45	.22	-.05
RE	-.02	.20	-.003
GER	-.85	.48	-.04
Female	-.06	.06	-.03
Minority	-.08	.05	-.04
MUS	.40	.48	.02
BED	.27	.38	.02
BL	-.10	.18	-.02
SOC	-.12	.15	-.03
Missing Data--Age	-.10	.13	-.02
Junior	.06	.08	.03
MK	-.42	.26	-.04
SPCH	.11	.48	.005
INS	-.42	.30	-.03
Veteran	.06	.05	.03
Missing Data--SAT Verbal	-.04	.05	-.02
PSY	-.28	.17	-.06
Age	-.002	.004	-.01
High School--GPA	.06	.10	.02
Sophomore Course	-.002	.08	-.001
Hours Transferred	-.0004	.001	-.02
Hours Attempted	-.0003	.001	-.01
EC	-.23	.15	-.07
ENG	-.23	.16	-.06
GEOG	-.23	.16	-.05
UL	-.22	.16	-.06
JOUR	-.26	.22	-.03
PHIL	-.20	.20	-.03
PHYS	-.32	.57	-.01
Senior Course	.02	.08	.01
FR	-.08	.38	-.004
SAT--Verbal	.00004	.0004	.003
Constant	-.50		

R^2 = .39

R^2(Adjusted) = .37

Standard Error of Estimate = .79

Number of Majors = 74

HEGIS Code: 2214

AN ANALYSIS OF TABLE 53, URBAN ECONOMICS MAJORS

* Due to the small number of majors (5), valid statistical conclusions cannot be stated as significant; however, the findings will be presented in order that some notion of causal effect is conveyed.

The adjusted R^2 was .56. The highlights may be summarized as follows:

* The estimator was rather stable from 1971 to 1972, increased from -.29 in 1972 to -.01 in 1974, and again decreased to -.38 in 1975. The overall effect was a decrease in the estimator from -.31 in 1971 to -.38 in 1975, which is equivalent to a letter grade being deflated by a factor of -07.

* On the average, Urban Economics majors did better in the following course areas: UL (.12); GEOG (.49); PSY (.60); MGT (.37); and SOC (.37).

* Urban Economics majors did worse in the following course areas: AC (-.95); BIO (-.75); CJ (-1.07); and HIST (-.27).

* No other variables had a significant impact on Urban Economics majors.

TABLE 53

REGRESSAND: GRADES IN ALL COURSES FOR URBAN ECONOMIC MAJORS

Sample Mean = 2.89 S.D. = .97 N = 148

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	-.38	.24	-.16
74	-.01	.17	-.002
72	-.29	.20	-.11
71	-.31	.45	-.04
GPA	1.09	.24	.79
AC	-.95	.61	-.14
BIO	-.75	.54	-.14
Senior Course	.11	.26	.06
CJ	-1.07	.70	-.13
HIST	-.27	.51	-.08
POLS	-.07	.52	-.02
UL	.12	.58	.03
BED	1.51	.91	.13
GEOG	.49	.54	.11
Missing Data--H.S. GPA	-.38	.48	-.19
Junior Course	.36	.26	.16
PSY	.60	.66	.07
MGT	.37	.55	.09
SOC	.37	.53	.09
SAT--Math	-.002	.01	-.08
Freshman Course	.10	.23	.04
BL	.05	.62	.01
MK	.08	.59	.01
RE	.26	.56	.06
IS	.34	.83	.03
PHIL	.28	.68	.03
ENG	.20	.51	.05
EC	.19	.51	.09
MATH	.15	.54	.03
DM	.15	.69	.02
INS	.14	.63	.02
Constant	.77		

R^2 = .65

R^2(Adjusted) = .56

Standard Error of Estimate = .65

Number of Majors = 5

HEGIS Code: 2214

AN ANALYSIS OF TABLE 54, URBAN GOVERNMENT MAJORS

- Due to the small number of majors (10), valid statistical conclusions cannot be stated as significant; however, the findings will be presented in order that some notion of causal effect is conveyed.

The adjusted R^2 was .46. The highlights may be summarized as follows:

- Generally, an upward trend was observed between 1971 and 1975, as the estimator increased from .37 in 1971 to .96 in 1975. This resulted in an increase in .59 of a letter grade from 1971 to 1975.

- On the average, Urban Government majors performed worse in the following course areas: DM (-3.34); HIST (-2.01); BIO (-2.49); MATH (-1.95); and CJ (-2.63).

- The variable, Minority (-1.02), had a significant negative impact.

TABLE 54

REGRESSAND: GRADES IN ALL COURSES FOR URBAN GOVERNMENT MAJORS

Sample Mean = 2.43 S.D. = 1.20 N = 164

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.96	.75	.36
74	.98	.75	.36
73	.56	.74	.18
72	.21	.75	.06
71	.37	.72	.10
GPA	1.26	.29	.78
Hours Attempted	.01	.002	.35
DM	-3.34	.91	-.31
SAT--Verbal	.01	.003	.38
HIST	-2.01	.71	-.42
BIO	-2.49	.98	-.23
MATH	-1.95	.70	-.42
CJ	-2.63	.90	-.24
Sophomore Course	-.32	.26	-.09
POLS	-1.16	.68	-.32
RE	-2.42	.94	-.22
Minority	1.02	.48	.21
EC	-1.71	.69	-.45
Hours Transferred	-.004	.01	-.11
GEOG	-1.74	.71	-.33
Female	-.61	.50	-.20
UL	-1.46	.70	-.39
SAT--Math	-.002	.002	-.10
MGT	-1.59	.74	-.25
JOUR	-1.61	.79	-.23
Senior Course	-.12	.22	-.05
CHEM	-1.51	.87	-.19
AC	-1.66	1.13	-.11
SOC	-1.26	.69	-.34
ENG	-1.23	.71	-.27
GEOL	-1.51	.89	-.17
MK	-1.55	1.16	-.14
PSY	-1.07	.72	-.19
BL	-1.14	.85	-.13
SPCH	-.99	1.16	-.06
PHIL	-1.03	1.12	-.07
Transfer-GPA Indicator	-.06	.32	-.06
Constant	-2.82		

R^2 = .57

R^2(Adjusted) = .46

Standard Error of Estimate = .89

Number of Majors = 10

HEGIS Code: 2214

AN ANALYSIS OF TABLE 55, UNDECLARED MAJORS (ASSOCIATE OF ARTS DEGREE)

The adjusted R^2 was .37. The highlights may be summarized as follows:

- A downward trend was observed from 1971 to 1972, as the estimator decreased from .12 in 1971 to -.10 in 1972. An upward trend began in 1972 and continued through 1974, at which point a stable trend established between 1974 and 1975. The overall effect was an increase in .43 of a letter grade during the entire period from 1971 to 1975.
- On the average, Undeclared majors (AA degree) did better in the following course areas: SOC (.39); RE (.56); BED (.67); and MGT (.63).
- Undeclared majors (AA degree) on the average did worse in the following course areas: MATH (-1.37); DM (-.89); FI (-1.45); HIST (-.70); POLS (-.76); and AC (-.61).
- No other variables had a significant impact on Undeclared majors (AA degree).

TABLE 55

REGRESSAND: GRADES IN ALL COURSES FOR UNDECLARED MAJORS (ASSOCIATE OF ARTS DEGREE)

Sample Mean = 2.47 S.D. = 1.01 N = 307

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.55	.49	.27
74	.56	.49	.24
73	.36	.48	.12
72	-.10	.47	-.03
71	.12	.48	.03
GPA	.83	.21	.43
MATH	-1.37	.32	-.23
DM	-.89	.26	-.21
FI	-1.45	.52	-.14
HIST	-.70	.26	-.15
POLS	-.76	.29	-.14
AC	-.61	.25	-.13
SAT--Verbal	.004	.003	.18
IS	-.77	.41	-.11
BIO	-1.29	.62	-.10
CHEM	-1.53	.93	-.09
GEOG	-.70	.40	-.09
Hours Attempted	.003	.003	.14
SOC	.39	.36	.05
ART	-.68	.59	-.05
Missing Data--Age	-.53	.33	-.15
Missing Data--SAT Verbal	.47	.63	.23
Veteran	-.29	.20	-.13
Age	-.02	.06	-.09
RE	.56	.66	.04
GEOL	-.36	.32	-.06
BED	.67	.51	.07
Senior Course	-.34	.28	-.09
ENG	-.16	.21	-.05
FR	-.52	.60	-.04
JOUR	-.37	.63	-.03
PHIL	.63	.84	.04
MGT	.27	.36	.05
High School--GPA	-.14	.39	-.03
EC	-.13	.24	-.03
INS	-.22	.52	-.02
SAT--Math	-.005	.01	-.15
MK	.20	.37	.04
Hours Transferred	-.001	.002	-.04
SPAN	-.13	.63	-.01
Minority	-.06	.26	-.02
PSY	.10	.34	.01
BL	.12	.46	.01
Junior Course	-.04	.20	-.01
Missing Data--H.S. GPA	.15	.47	.07
Transfer-GPA Indicator	-.04	.15	-.04
SPCH	.06	.43	.01
Constant	1.15		

R^2 = .46

R^2(Adjusted) = .37

Standard Error of Estimate = .80

Number of Majors = 19

HEGIS Code: 4999

AN ANALYSIS OF TABLE 56, GENERAL STUDIES MAJORS

The adjusted R^2 was .43. The highlights may be summarized as follows:

* A downward trend was observed between 1971 and 1972, as the estimator decreased from .02 to -.17. An upward trend was established in 1972 and continued through 1975. The result of the above trend from 1971 to 1975 was a .29 increase in a letter grade, as the estimator increased from .02 in 1971 to .31 in 1975.

* On the average, General Studies majors did better in the following course areas: FED (.64); SPCH (.12); UL (.94); and BED (.17).

* General Studies majors on the average did worse in the following course areas: HIST (-.54); AC (-.42); BIO (-.50); CHEM (-.56); MATH (-.30); and POLS (-.31).

* No other variables had a significant impact on General Studies majors.

TABLE 56

REGRESSAND: GRADES IN ALL COURSES FOR GENERAL STUDIES MAJORS

Sample Mean = 2.35   S.D. = 1.10   N = 1584

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.31	.19	.14
	74	.15	.19	.06
	73	-.04	.19	-.01
	72	-.17	.20	-.03
	71	.02	.20	.003
GPA		.93	.04	.57
HIST		-.54	.12	-.16
Freshman Course		.03	.07	.01
AC		-.42	.18	-.05
BIO		-.50	.16	-.07
FED		.64	.32	.04
SPCH		.12	.19	.01
CHEM		-.56	.20	-.06
MATH		-.30	.12	-.08
POLS		-.31	.13	-.07
PHIL		-.36	.19	-.04
PHYS		-.53	.24	-.05
UL		.94	.60	.03
GEOL		-.35	.17	-.05
ART		-.42	.22	-.04
GEOG		-.30	.16	-.05
ENG		-.08	.11	-.03
Age		.02	.01	.06
BED		.17	.16	.03
MUS		.14	.18	.02
Hours Transferred		-.003	.002	-.06
SPAN		.20	.20	.02
Transfer-GPA Indicator		.02	.04	.02
JOUR		-.52	.43	-.02
HPRS		.28	.31	.02
DM		-.19	.17	-.03
Minority		-.05	.06	-.02
RE		-.41	.39	-.02
MGT		-.26	.25	-.02
Female		.01	.05	.01
CJ		-.22	.26	-.02
Junior Course		.11	.10	.03
IS		-.19	.26	-.02
BL		-.23	.28	-.02
GER		-.26	.39	-.01
INS		-.22	.44	-.01
High School--GPA		.02	.03	.01
Missing Data--Age		-.05	.11	-.01
Missing Data--SAT Verbal		.02	.08	.01
FR		-.06	.18	-.01
SAT--Verbal		.0002	.0004	.01
SOC		-.01	.14	-.003
Hours Attempted		.0003	.001	.01
MK		-.09	.40	-.005
ECI		.24	.84	.01
Missing Data--H.S. GPA		.03	.09	.01
SAT--Math		-.0001	.0004	-.01
Senior Course		.05	.16	.01
Veteran		-.02	.10	-.01
EC		.05	.16	.01
PSY		.03	.14	.01
Constant		-.29		

$R^2 = .45$

R^2(Adjusted) = .43

Standard Error of Estimate = .83

Number of Majors = 115

HEGIS Code: 4999

AN ANALYSIS OF TABLE 57, COMMERCIAL MUSIC/RECORDING MAJORS

The adjusted R^2 was .41. The highlights may be summarized as follows:

- A continued upward trend was observed between 1971 and 1975, as the estimator increased from .14 in 1971 to .07 in 1975. This obvious upward grading trend resulted in an increase in .56 of a letter grade from 1971 to 1975.
- On the average, Commercial Music/Recording majors did better in the following course areas: SPCH (.36); INS (.84); and HPRS (.69).
- Commercial Music/Recording majors on the average performed worse in the following course areas: HIST (-.84); AC (-.55); EC (-.49); MATH (-.41); PHYS (-.43); POLS (-.44); and GEOL (-.96).
- No other variables had a significant impact on Commercial Music/ Recording majors.

TABLE 57

REGRESSAND: GRADES IN ALL COURSES FOR COMMERCIAL MUSIC RECORDING MAJORS

Sample Mean = 2.53 S.D. = 1.09 N = 689

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.70	.38	.32
	74	.63	.37	.25
	73	.48	.38	.14
	72	.36	.38	.09
	71	.14	.38	.03
GPA		.90	.08	.51
HIST		-.84	.16	-.18
IS		1.33	.46	.09
AC		-.55	.14	-.13
BL		-.33	.22	-.06
EC		-.49	.18	-.09
MATH		-.41	.17	-.08
PHYS		-.43	.18	-.08
PHIL		-.55	.34	-.05
POLS		-.44	.21	-.07
GEOL		-.96	.44	-.07
ENG		-.25	.13	-.07
Junior Course		-.30	.16	-.09
BIO		-.52	.32	-.05
ART		-.46	.27	-.05
FR		-.72	.50	-.04
DM		-.40	.29	-.04
Veteran		-.14	.12	-.05
ECI		1.24	.88	.04
SPCH		.36	.30	.04
Female		-.11	.11	-.04
Senior Course		-.18	.20	-.03
INS		.84	.86	.03
FED		-.72	.87	-.03
HPRS		.69	.85	.02
GEOG		-.34	.50	-.02
Hours Attempted		.001	.001	.03
Minority		-.12	.13	-.03
SAT--Verbal		-.0004	.001	-.02
PSY		.13	.20	.02
SOC		.18	.28	.02
Age		.02	.02	.05
MGT		-.42	.62	-.02
High School--GPA		.12	.12	.05
Hours Transferred		-.001	.001	-.04
Missing Data--SAT Verbal		-.07	.11	-.03
Missing Data--Age		-.16	.29	-.02
BED		.17	.40	.01
JOUR		-.07	.26	-.01
CHEM		-.10	.41	-.01
GER		.14	.61	.01
Sophomore Course		-.02	.10	-.01
SAT--Math		-.0001	.001	-.01
MUS		.03	.17	.01
MK		.07	.51	.004
Constant		-.53		

$R^2 = .45$

R^2(Adjusted) = .41

Standard Error of Estimate = .84

Number of Majors = 46

HEGIS Code: 5008

AN ANALYSIS OF TABLE 58, HOTEL MANAGEMENT MAJORS

The adjusted R^2 was .47. The highlights may be summarized as follows:

- There was a downward trend between 1971 and 1973, as the estimator decreased from -.66 to -.88. An upward trend was observed from 1971 to 1974, and the period from 1974 to 1975 represented another slight downward trend, as the estimator again reversed itself. During the period from 1971 to 1975, the estimator increased from -.66 in 1971 to -.64 in 1975, which represents an increase of only .02 of a letter grade during the entire period.

- On the average, Hotel Management majors performed worse in the following course areas: AC (-.91); DM (-1.35); BIO (-2.20); HIST (-1.06); MATH (-1.01); EC (-.75); and POLS (-1.13).

- Hotel Management majors tend not to do as well in Senior Courses (-.68).

- The variable, Veteran, (-.20), had a significant positive impact, which can be interpreted to mean that veterans typically performed better than non-veterans in the area of Hotel Management.

TABLE 58

REGRESSAND: GRADES IN ALL COURSES FOR HOTEL MANAGEMENT MAJORS

Sample Mean = 2.67 S.D. = 1.12 N = 586

Regressors	Estimators	Standard Error of Estimator	—
Year of Course: 75	-.64	.43	-.28
74	-.61	.43	-.25
73	-.88	.43	-.28
72	-.87	.44	-.23
71	-.66	.46	-.11
GPA	-.91	.07	-.50
AC	-.91	.13	-.24
DM	-1.35	.21	-.22
BIO	-2.20	.35	-.20
HIST	-1.06	.17	-.23
MATH	-1.01	.19	-.18
EC	-.75	.15	-.17
Junior Course	-.31	.20	-.08
POLS	-1.13	.24	-.16
Senior Course	-.68	.21	-.12
PSY	-.79	.22	-.11
Transfer-GPA Indicator	-.05	.06	-.06
PHIL	-1.22	.38	-.10
GEOL	-1.21	.39	-.10
BED	-.56	.20	-.10
ENG	-.53	.17	-.11
GEOG	-1.35	.49	-.09
HPRS	1.45	.84	.05
Veteran	.20	.10	.08
CJ	-1.65	.83	-.06
CHEM	-.93	.45	-.07
SOC	-.50	.23	-.07
Missing Data--Age	-.23	.16	-.06
Hours Attempted	.003	.002	.08
FI	-.76	.42	-.06
Missing Data--H.S. GPA	.05	.17	.02
MK	-.63	.41	-.05
RE	-.58	.39	-.05
IS	-.54	.47	-.04
Hours Transferred	-.001	.002	-.04
SPCH	-.25	.22	-.04
Freshman Course	.09	.10	.04
INS	-.16	.29	-.02
BL	-.17	.36	-.02
Minority	-.09	.12	-.04
Female	.07	.11	.03
FR	-.18	.49	-.01
Missing Data--SAT Verbal	.07	.14	.03
Age	-.002	.01	-.01
SAT--Verbal	-.0002	.001	-.01
High School--GPA	-.01	.06	-.005
Constant	1.41		

$R^2 = .51$

R^2(Adjusted) = .47

Standard Error of Estimate = .82

Number of Majors = 36

HEGIS Code: 5010

AN ANALYSIS OF TABLE 59, SECRETARIAL SCIENCE MAJORS

The adjusted R^2 was .45. The highlights may be summarized as follows:

- The estimator was rather stable between 1971 and 1972, increased by 17% from 1972 to 1973 and increased by 6% from 1973 to 1974. From 1974 to 1975 the estimator decreased by 13%. The final result was an increase in the estimator from -1.13 in 1971 to -1.01 in 1975, which calculates to an increase in .12 of a letter grade.
- On the average, Secretarial Science majors performed better in the following course areas: BED (.13); HPRS (.27); and RE (.74).
- Secretarial Science majors on the average performed worse in the following course areas: HIST (-1.15); POLS (-1.10); AC (-1.01); GEOG (-1.00); and GEOL (-.90).
- The variables, Senior Course (.67), Age (.03), and Freshman Course (.40) had positive weights, while Hours Attempted (-.002) had a negative weight.

TABLE 59

REGRESSAND: GRADES IN ALL COURSES FOR SECRETARIAL SCIENCE MAJORS

Sample Mean = 2.57 S.D. = 1.04 N = 811

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	-1.01	.36	-.48
74	-.89	.36	-.39
73	-.96	.36	-.34
72	-1.15	.36	-.31
71	-1.13	.38	-.20
GPA	.88	.06	.52
BED	.13	.19	.06
HIST	-1.15	.20	-.35
POLS	-1.10	.22	-.23
Senior Course	.67	.23	.13
AC	-1.01	.31	-.11
GEOG	-1.00	.24	-.17
HPRS	.27	.32	.03
GEOL	-.90	.25	-.14
ART	-1.10	.39	-.08
Sophomore Course	.15	.18	.07
PSY	.01	.23	.002
Transfer-GPA Indicator	-.03	.04	-.03
Hours Attempted	-.002	.001	-.06
Age	.03	.01	.06
DM	-.78	.29	-.09
BIO	-.75	.29	-.09
MGT	-1.00	.80	-.03
ENG	-.48	.19	-.17
MATH	-.51	.21	-.13
Freshman Course	.40	.20	.19
SPAN	-1.00	.58	-.05
Hours Transferred	-.002	.002	-.05
EC	-.39	.23	-.07
High School--GPA	.07	.08	.03
RE	.74	.81	.03
CJ	-.47	.42	-.03
FED	.14	.31	.01
BL	.35	.58	.02
FR	-.34	.33	-.03
NURS	-.39	.44	-.03
SOC	-.22	.24	-.03
SPE	-.36	.47	-.02
Veteran	.12	.21	.02
SPCH	-.18	.33	-.02
SAT--Verbal	.0001	.001	.01
PHIL	.19	.58	.01
GER	-.23	.82	-.01
CHEM	-.18	.59	-.01
SAT--Math	.0001	.0004	.01
PHYS	.17	.80	.01
Constant	.79		

$R^2 = .48$

R^2(Adjusted) = .45

Standard Error of Estimate = .77

Number of Majors = 47

HEGIS Code: 5005

AN ANALYSIS OF TABLE 60, MENTAL HEALTH ASSISTANTS MAJORS

The adjusted R^2 was .50. The highlights may be summarized as follows:

- A fairly stable grading trend was observed between 1971 and 1973, at which point an upward trend set in and continued through 1975. The overall effect of the above trend was an increase in the estimator from .30 in 1971 to .59 in 1975, which is equivalent to an increase in .29 of a letter grade.
- Mental Health Assistants majors on the average performed better in the following course areas: SPAN (.51); and BED (.57).
- On the average, Mental Health Assistants majors performed worse in the following course areas: BIO (-1.20); MATH (-.92); HIST (-.82); POLS (-.70); ART (-.94); and SOC (-.64).
- The variables Junior Course (.24) and Hours Attempted (.002) had positive impacts.

TABLE 60

REGRESSAND: GRADES IN ALL COURSES FOR MENTAL HEALTH ASSISTANTS MAJORS

Sample Mean = 3.01 S.D. = .99 N = 1132

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.59	.22	.29
74	.50	.21	.23
73	.29	.21	.11
72	.33	.22	.09
71	.30	.23	.06
GPA	.75	.06	.44
BIO	-1.20	.10	-.27
MATH	-.92	.11	-.20
HIST	-.82	.11	-.17
POLS	-.70	.15	-.10
ART	-.94	.22	-.09
SOC	-.64	.13	-.11
CHEM	-.77	.20	-.09
ENG	-.38	.08	-.11
Transfer-GPA Indicator	-.05	.03	-.07
PHIL	-.84	.23	-.08
AC	-.99	.36	-.06
PSY	-.30	.08	-.10
Junior Course	.24	.10	.10
EC	-1.20	.42	-.06
NURS	-.86	.33	-.06
JOUR	-1.06	.51	-.04
GEOG	-.89	.41	-.05
FED	-.42	.18	-.05
Minority	-.12	.07	-.05
SPCH	-.68	.36	-.04
PHYS	-.57	.41	-.03
SPAN	.51	.29	.04
BED	.57	.36	.03
CJ	-1.11	.71	-.03
SAT--Verbal	.001	.001	.05
Hours Attempted	.002	.001	.07
Veteran	-.23	.14	-.05
Missing Data--H.S. GPA	-.14	.09	-.07
High School--GPA	.13	.10	.04
INS	-.95	.72	-.03
Age	.001	.003	.01
SAT--Math	.0001	.0005	.004
MPRS	.11	.23	.01
Sophomore Course	.04	.10	.02
PR	-.13	.27	-.01
MGT	-.15	.41	-.01
Female	.01	.09	.002
Missing Data--Age	-.04	.13	-.01
GEOL	-.08	.30	-.01
Missing Data--SAT Verbal	.41	.27	.20
Missing Data--SAT Math	-.41	.28	-.20
Hours Transferred	.0003	.001	.01
Freshman Course	.02	.11	.01
Constant	-.32		

R^2 = .52

R^2(Adjusted) = .50

Standard Error of Estimate = .70

Number of Majors = 59

HEGIS Code: 5216

AN ANALYSIS OF TABLE 61, PEDIATRIC ASSISTANTS MAJORS

The adjusted R^2 was .47. The highlights may be summarized as follows:

- There was a downward trend between 1971 and 1972, as the estimator decreased from .27 in 1971 to .09 in 1972. An upward trend was established in 1972 and continued through 1975. The result for the entire period between 1971 and 1975 was an increase in the estimator from .27 in 1971 to .42 in 1975.

- On the average, Pediatric Assistants majors did better in the following course areas: PSY (.29); and MUS (.27).

- Pediatric Assistants majors on the average did worse in the following course areas: BIO (-.53); HIST (-.58); and ENG (-.33).

- No other variables had a significant impact on Pediatric Assistants majors.

TABLE 61

REGRESSAND: GRADES IN ALL COURSES FOR PEDIATRIC ASSISTANTS MAJORS

Sample Mean = 2.98 S.D. = .85 N = 474

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.42	.39	.24
	74	.25	.39	.14
	73	.08	.39	.04
	72	-.09	.39	-.03
	71	.27	.42	.04
GPA		.92	.10	.55
Freshman Course		-.13	.18	-.08
BIO		-.53	.11	-.22
HIST		-.58	.13	-.19
ENG		-.33	.11	-.12
Transfer-GPA Indicator		-.05	.04	-.09
POLS		-.50	.30	-.06
MATH		-.23	.15	-.06
SAT--Math		.001	.001	.06
PSY		.29	.25	.04
GEOG		-.43	.37	-.04
Missing Data--Math		.13	.12	.06
Age		-.01	.02	-.06
Hours Attempted		.002	.002	.07
IS		-.43	.65	-.02
MUS		.27	.45	.02
ART		.30	.65	.02
UL		.30	.65	.02
GEOL		-.11	.33	-.01
Hours Transferred		.0004	.002	.01
FED		-.07	.21	-.02
Missing Data--H.S. GPA		.03	.13	.02
SAT--Verbal		.0001	.001	.02
SOC		.04	.17	.01
Sophomore Course		-.04	.18	-.02
High School--GPA		-.05	.15	-.02
Minority		.06	.20	.02
Female		-.09	.28	-.03
Veteran		-.03	.13	-.01
HPRS		.05	.45	.004
Constant		.25		

R^2 = .51

R^2(Adjusted) = .47

Standard Error of Estimate = .62

Number of Majors = 27

HEGIS Code: 5299

AN ANALYSIS OF TABLE 62, RESPIRATORY THERAPY MAJORS

The adjusted R^2 was .28. The highlights may be summarized as follows:

- The grading trend was relatively stable from 1971 through 1975. The estimator decreased slightly between 1971 and 1972, at which point a stable trend was established and remained during the period from 1972 to 1975. The results of the above described trend was a decrease in the estimator, from .34 in 1971 to .27 in 1975, or a deflationary letter grade factor of .08.

- Respiratory Therapy majors on the average performed better in the following course areas: FED (.26); ART (1.45); and HPRS (.74).

- On the average, Respiratory Therapy majors performed worse in the following course areas: CHEM (-.43); PHYS (-.58); HIST (-.57); PHIL (-.90); DM (-1.41); and SPAN (-1.00).

- No other variables had a significant impact on Respiratory Therapy majors.

TABLE 62

REGRESSAND: GRADES IN ALL COURSES FOR RESPIRATORY THERAPY MAJORS

Sample Mean = 2.79 S.D. = .88 N = 1493

Regressors		Estimators	Standard Error of Estimator	β
Year of Course:	75	.26	.17	.14
	74	.27	.17	.14
	73	.29	.17	.12
	72	.26	.17	.09
	71	.34	.17	.10
GPA		.88	.05	.44
Freshman Course		-.09	.07	-.05
CHEM		-.43	.08	-.14
PHYS		-.58	.12	-.11
HIST		-.57	.13	-.10
PHIL		-.90	.26	-.08
DM		-1.41	.44	-.07
SPAN		-1.00	.31	-.07
FED		.26	.12	.06
ENG		-.24	.09	-.06
POLS		-.40	.14	-.06
ART		1.45	.75	.04
EC		-.65	.38	-.04
GEOL		-1.48	.75	-.04
MATH		-.18	.09	-.05
BIO		-.14	.08	-.04
MK		-.95	.53	-.04
Senior Course		.14	.09	.04
HPRS		.74	.53	.03
MUS		.91	.76	.03
Transfer-GPA Indicator		-.03	.02	-.06
Minority		-.07	.08	-.03
SPCH		.47	.53	.02
Missing Data--SAT Verbal		-.04	.05	-.02
FR		-.37	.44	-.02
Hours Attempted		-.001	.001	-.03
Female		-.04	.06	-.02
SAT--Verbal		.001	.001	.03
PSY		-.09	.13	-.02
High School--GPA		.05	.16	.01
Sophomore Course		-.04	.07	-.02
Age		-.004	.01	-.02
Hours Transferred		.0004	.001	.02
AC		.38	.75	.01
Veteran		.02	.05	.01
SAT--Math		-.0002	.001	-.01
MGT		-.03	.12	-.01
Missing Data--Age		-.07	.24	-.01
Missing Data--H.S. GPA		.03	.13	.01
BL		.17	.75	.01
RE		-.09	.54	-.004
SOC		-.03	.25	-.002
Constant		.12		

$R^2 = .30$

R^2(Adjusted) = .28

Standard Error of Estimate = .75

Number of Majors = 78

HEGIS Code: 5215

AN ANALYSIS OF TABLE 63, UNDECLARED MAJORS

The adjusted R^2 was .39. The highlights may be summarized as follows:

* The grading trend was stable between 1971 and 1972, at which point an upward trend was established and continued through 1975. The overall result was an increase in the estimator from .06 in 1971 to .29 in 1975, or by .23 of a letter grade.

* On the average, Undeclared majors performed better in the following course areas: MGT (.08); MUS (.27); and HPRS (.51). These positive weights seem to imply that Undeclared majors are pursuing areas of special interest.

* Undeclared majors on the average performed worse in the following course areas: HIST (-.55); AC (-.50); BIO (-.59); IS (-.43); DM (-.28); AS (-1.37); and FI (-.35).

* Freshman and Sophomore Courses, (-.04) and (-.07) respectively, were significantly more difficult for Undeclared majors.

* The Transfer-GPA Indicator, (-.04), had a negative impact and Minority, (-.05), also had a significant negative impact.

TABLE 63

REGRESSAND: GRADES IN ALL COURSES FOR UNDECLARED MAJORS

Sample Mean = 2.46 S.D. = 1.09 N = 17760

Regressors	Estimators	Standard Error of Estimator	β
Year of Course: 75	.29	.05	.13
74	.22	.05	.09
73	.13	.05	.05
72	.06	.05	.02
71	.06	.05	.02
GPA	.93	.01	.57
HIST	-.55	.03	-.13
AC	-.50	.03	-.12
BIO	-.59	.05	-.08
MGT	.08	.04	.02
Freshman Course	-.04	.02	-.02
MUS	.27	.07	.02
Transfer-GPA Indicator	-.04	.01	-.04
Sophomore Course	-.07	.02	-.03
IS	-.43	.05	-.06
DM	-.28	.03	-.07
AS	-1.37	.25	-.03
HPRS	.51	.14	.02
FI	-.35	.06	-.04
GEOL	-.38	.05	-.05
MATH	-.31	.04	-.06
POLS	-.28	.04	-.05
CHEM	-.32	.05	-.05
PHYS	-.43	.07	-.04
Missing Data--SAT Math	.04	.02	.02
GEOG	-.30	.05	-.04
ENG	-.17	.03	-.05
PHIL	-.26	.05	-.03
Hours Attempted	.001	.0002	.03
ART	-.21	.06	-.02
Minority	-.05	.02	-.02
MK	-.14	.04	-.02
SOC	-.12	.04	-.02
Age	-.003	.002	-.01
INS	-.16	.06	-.02
FR	-.20	.07	-.02
CJ	-.15	.06	-.02
GER	-.29	.12	-.01
EC	-.07	.03	-.02
RE	-.08	.05	-.01
JOUR	-.14	.08	-.01
Missing Data--H.S. GPA	.05	.03	.02
SAT--Verbal	.0001	.0001	.01
SPCH	.11	.09	.01
SPE	.20	.19	.01
FED	.11	.09	.01
BED	.08	.08	.01
BL	.04	.05	.01
Female	.01	.02	.005
SPAN	-.06	.08	-.004
SAT--Math	.0001	.0001	.005
NURS	.11	.17	.004
Hours Transferred	-.0002	.0002	-.01
Veteran	-.01	.02	-.003
Senior Course	.01	.02	.003
UL	-.02	.08	-.001
High School--GPA	.003	.02	.001
Constant	.15		

R^2 = .39

R^2(Adjusted) = .39

Standard Error of Estimate = .85

Number of Majors = 1126

HEGIS Code: 0000

Analysis of Major Field by Individual Courses

Chart 2 depicts the performance of the major fields by specific courses within the different academic disciplines, based on the 144 courses analyzed in Prather and Smith (1976b). The coefficients in Chart 2 are the regression estimators for 27 majors delineated in the previous study. The estimator may be interpreted as the weight, expressed in proportion of a letter grade, a particular major has in the respective courses. Highlights of the performance of each major field in the academic disciplines listed may be summarized as follows:

* Undeclared majors (baccalaureate degree) registered notably negative coefficients in the academic disciplines of Communications, Physical Science, Psychology and Health Services and Paramedical Technology; performance in other disciplines registered a relatively balanced proportion of negative and positive weights.

* Accounting majors registered notable positive coefficients in the academic disciplines of Business and Commerce, Computer Science and Systems Analysis, Education and Mathematics. Notable negative weights were recorded in the disciplines of Biological Science, Foreign Languages, Letters, Physical Science and Health Services and Paramedical Technology; performance in other disciplines registered a relatively balanced proportion of negative and positive weights.

* Anthropology majors registered notable positive weights in Communications, Health Services and Paramedical Technology courses. Academic disciplines in which negative coefficients were recorded are Education, Foreign Languages, Letters, Physical Science and Psychology.

* Business Education majors recorded positive coefficients in the academic disciplines of Education and Foreign Languages. Negative weights were registered in the course areas of Biological Sciences, Business and Commerce, Health Professions, Letters, Mathematics, Physical Science and Social Science. Other academic disciplines registered a relatively balanced proportion of negative and positive weights.

* Biology majors registered positive weights in the course areas of Biological Science, Education, Foreign Languages, Letters, and Psychology. Negative weights were recorded in the academic disciplines of Health Professions, Physical Science and Health Services and Paramedical Technology; other course areas registered a relatively balanced proportion of negative and positive weights.

- Criminal Justice majors recorded a positive coefficient in the academic discipline of Health Services and Para-Medical Technology. Negative coefficients were registered in the academic discipline of Business and Commerce, Foreign Languages, Letters, Mathematics, Physical Sciences, Psychology and Social Science. Other academic disciplines recorded a relative balanced proportion of negative and positive coefficients.

- Economics majors registered positive weights in the course areas of Business and Commerce and Social Science. Negative weights were recorded in the academic disciplines of Communications, Foreign Languages, Letters and Mathematics. Other academic disciplines recorded a relative balanced proportion of negative and positive weights.

- Early Childhood Education majors did not register any notable positive coefficients in any academic discipline. However, negative coefficients were recorded in the academic disciplines of Biological Sciences, Business and Commerce, Communications, Foreign Languages, Letters, Mathematics, Physical Sciences and Social Sciences. The course area of Education recorded a relative balance between negative and positive weights and the other course areas included recorded no coefficients for Early Childhood Education majors.

- English majors registered positive weights in the academic disciplines of Education, Health Professions and Letters. Negative coefficients were recorded in the course areas of Foreign Languages, Physical Sciences, Psychology and Business and Commerce. Other academic disciplines recorded a relative balanced proportion of negative and positive weights.

- Elementary Education majors did not register any notable positive weights in any course areas. Negative weights were recorded in the academic disciplines of Biological Sciences, Business and Commerce, Foreign Languages, Letters, Mathematics, Physical Sciences and Social Sciences.

- Finance majors registered positive coefficients in the academic disciplines of Business and Commerce and Education. Negative weights were recorded in the academic disciplines of Communications, Letters, Physical Sciences and Psychology. Other course areas recorded a relatively balanced proportion of negative and positive coefficients.

- General Studies majors registered positive weights in the academic disciplines of Biological Sciences, Business and Commerce, Computer Science and Systems Analysis, Education, Foreign Languages and Social Sciences. The only academic discipline registering notable negative coefficients was Letters. The fact that General Studies majors tend to do well in most academic disciplines suggests that students majoring in General Studies compose a rather heterogeneous population.

* History majors registered positive coefficients in the academic disciplines of Letters and Social Sciences. Negative weights were recorded in the course areas of Biological Sciences, Business and Commerce, Communications, Computer Science and Systems Analysis, Foreign Languages, Mathematics, Physical Sciences and Psychology. Other academic disciplines recorded a relatively balanced proportion of negative and positive weights.

* Journalism majors recorded positive weights in the course areas of Communications, Education, Letters and Psychology. Negative coefficients were registered in the course areas of Biological Sciences, Foreign Languages and Mathematics.

* Mathematics majors recorded positive weights in the academic disciplines of Business and Commerce, Education, Mathematics, Psychology and Social Sciences. Negative weights were registered in the course areas of Biological Sciences and Foreign Languages; other academic disciplines recorded a relatively balanced proportion of negative and positive weights.

* Management majors registered a positive coefficient in the academic discipline of Mathematics. Negative coefficients were registered in the course areas of Biological Sciences, Computer Science and Systems Analysis, Health Professions and Letters.

* Marketing majors recorded positive weights in the course areas of Business and Commerce and Education. Negative coefficients were registered in the academic disciplines of Letters, Mathematics and Physical Sciences; other academic disciplines recorded a relatively balanced proportion of negative and positive weights.

* Medical Technology majors recorded notable positive weights in all academic areas excepting Communications and Letters, in which negative coefficients were recorded. This suggests that the students that comprise this major group generally perform well academically.

* Music majors recorded a positive weight in the academic disciplines of Computer Science and Systems Analysis. Negative weights were registered in the course areas of Foreign Languages, Letters, Mathematics, Physical Sciences, Psychology and Social Sciences. Other academic disciplines recorded a relatively balanced proportion of negative and positive weights.

* Nursing majors registered notable positive weights in the course areas of Mathematics, Psychology and Social Sciences. Negative coefficients were recorded in the academic disciplines of Physical Sciences and Health Services and Para-medical Technology.

* Political Science majors recorded positive coefficients in the academic disciplines of Computer Science and Systems Analysis, Psychology and Social Sciences. Notable negative weights were registered in the course areas of Business and Commerce, Education, Foreign Languages, Letters, Mathematics and Physical Sciences; other academic disciplines recorded a relatively balanced proportion of negative and positive weights.

* Psychology majors registered positive coefficients in the course areas of Communications, Education, Psychology and Social Sciences. Negative weights were recorded in the academic disciplines of Biological Sciences, Computer Science and Systems Analysis, Foreign Languages, Health Professions and Physical Sciences.

* Real Estate majors recorded positive weights in the course areas of Biological Sciences and Education. Notable negative coefficients were registered in the academic disciplines of Foreign Languages, Letters and Mathematics. Other course areas registered a relatively balanced proportion of negative and positive coefficients.

* Secondary Education majors registered positive coefficients in the academic disciplines of Computer Science and Systems Analysis, Education and Mathematics. Negative weights were recorded in the course areas of Biological Sciences, Business and Commerce, Communications, Foreign Languages, Letters, Physical Sciences and Psychology.

* Special Education majors recorded a positive weight only in the academic discipline of Education; negative weights were registered in all other course areas, excepting Computer Science and Systems Analysis, where no coefficients appeared.

* Sociology majors registered positive coefficients in the course areas of Health Professions, Letters and Health Services and Para-medical Technology. Notable negative weights were recorded in the academic disciplines of Communications, Computer Science and Systems Analysis, Education, Foreign Languages, Mathematics and Physical Sciences. Other course areas recorded a relatively balanced proportion of negative and positive coefficients.

* Studio majors recorded positive coefficients in the academic disciplines of Biological Sciences and Computer Science and Systems Analysis. Notable negative weights were recorded in the course areas of Communications, Education, Foreign Languages, Letters, Mathematics, Physical Sciences.

* Social Welfare majors registered a notable positive weight only in the course area of Health Professions. Negative coefficients were recorded in the academic disciplines of Business and Commerce, Computer Science and Systems Analysis, Foreign Languages, Letters, Physical Science and Psychology; other academic disciplines recorded a relatively balanced proportion of negative and positive coefficients.

CHART 2

ESTIMATED LETTER GRADE IMPACT BY MAJORS FOR 144 COURSES
SEGMENTED INTO ACADEMIC DISCIPLINES

MAJORS

		Undeclared	Accounting	Anthropology	Business Educ.	Biology	Criminal Justice	Economics	Early Childhood Education	English	Elementary Education	Finance	General Studies	History	Journalism	Mathematics	Management	Marketing	Medical Technology	Music	Nursing	Political Science	Psychology	Real Estate	Secondary Education	Special Education	Sociology	Studio	Social Welfare
Biological Sciences	BIO 100	.21	.11	-.15	-.44	.57	.07	-.06	-.34	.33	-.15	-.08	.12	-.24	.25	.27	-.03		.45	.30	.39	-.18	.11	.48	-.35	-.03	-.19	.09	-.12
	BIO 111		.16	.28	.19	.64		-.59	-.22	.19	-.51		.14	-.26	-.10	-.26	-1.22	-.32	.76	-.75	.22		-.06		-.28	-1.30	.18	.11	.33
	BIO 112	.05		.32	.46	.86	.33	.38	-.41	.74	-.31			-1.07	-.39	-.42	-.24	.47	.62	-.12	.23	-.19	.29	.64	-.67	.80	.21	.29	.44
	BIO 200	-.06	-.16	.19	.24	.30	-.60		-.55	.26	-.44	.57	.53	-.28	-.42	-.26	-.11	-.26	.43	.52		-.47	-.05	-.36	-.15	-.29	-.13	-.03	-.49
	MICR 250	.16	.75	-.15		.58					-.25					-.46				.94	-.13		-.27						
	MICR 351	-.31	-.31	.86		.52				-.28									.48		.16		.03	1.75	.23				
	MT 452					.35													1.34										
	ZOO 313	.17	-1.05		-1.46	-.04				-.64	-.64				.88	-.32			-.14		-.17	.71	-.43	.76	-.15				
Business & Commerce	AC 201	.009	.26	.35	-.30	-.21	-.09		.21	-.16	-.85		-.19	-.83	-.32	.28	-.05	-.10	.47	-.21		-.13	.03	.04	-.22	-.36	.33	-.35	
	AC 202	-.07	.20	.52	-.13	.14	-.40	-.15	-.75			-.03	.19	-.53	.19	.68	-.18	-.08	.35	1.24		-.49	.13	-.04	-1.07	-.97	-.14	-.83	
	AC 409	.89	.83	.87	.67	.94	-.30	.74				.87	2.45			.71	.60	.58				-.41	.37	.40					
	AC 410	.27	.22	1.58	1.37			.38				.28					-.50	.22					.91	.21					
	AC 433	.22						.27				.82					-.23	.50					1.29	1.37					
	BL 301	.18	.20	.10	-.08	.48	.11	.09			-.04	.16	-.23	.12	-.13		.13	.12	.81	.38	.33	.19	-.04	.16	-.76	.15	.26	.20	1.56
	BL 401	.28	.36				.85	-.15		-.15		.37	1.43	-.08			.13	.10				-.11		.59					
	DM 121	.25	.40	.92	-.27	-.27	.04	.49	-.97	-.16	.80	.18	.16	-.47	-.19	.86	.31	.20	.08	-.88	.60	-.42	-.14	.41	-.83	-.80	-.12	.23	-.21
	DM 122	.32	.43		-.79	.32	.34	.38	.14	-.13	1.12	.22	-.07	-1.31		1.20	.11	.18	1.88	.77	-.57			.08	-1.06	.08	-.16	-.16	
	DM 231	.23	.25	-.72		-.22	-.14	.11		-.21	-.34	.20	.20	.11		.82	.10	.09		-.23		-.56	1.17	-.02	-1.16		-.28		-.11
	DM 302	.33	.42		-.29	.21	-.08	.19				.12	.50	.53	-.20	1.28		.25			-1.53	-.32	.51	.07	-.56	.48	-.43	-.23	.27
	DM 312	.14	.25	-.17	.17	.51	-.42	.19				.22	.55		.21	.59	.10	.16		.22			.62	.15	.19			.82	-.30
	EC 201	.21	.23	.29	.10	.34	.09	.25	-.37	.03	-.51	.32	.29	-.07	-.11	.51	.13	.08	.16	.46	-.42	.11	.11	.23	-.06	-.13	-.04	-.15	
	EC 202	.19	.32		.11	.15	-.15	.44	-.55	-.09	-.35	.17	.07	-.12	.23	.38	.14	.22	-.38	.08	1.27	-.21		.09	-.09		.38	.65	-.11
	EC 350	.20	.17			-1.23	-.34	.29		-.24	.37	.17			.57	.06	.03	.09		.15		.39	-.38	-.02				1.04	
	EC 386	-.16	.02				-.21	.04				-.27		.71	.28	.27	-.04	.78				-.15	-.67	-.06	1.17			.28	-2.28
	FI 330	.11	.38		-.05	.39		.07				.32		-.32	.56	-.88		.07				-.60	.58	-.14			.40	-.32	
	INS 350	-.11	.10		-.04		-1.29	-.08		.25			.07	.26	-.51	.27	-.22	-.20	.76			-.12	-.74	-.28	-.34	-1.09	.56	-.54	
	MGT 350	.18	.14	-.16	-.22	-.18	-.17	.26	-.75	-.19		.22		.26	.50	.24	.18	.19	.41	-.33	-.03	.03	.02	.08	-.47	-.92	-.11		-.04
	MGT 401	-.12	.14		-.47		-.32			-1.40	.20	-.05		-.49	-.28		.03				.17	-.33	.50			.42	.70		
	MGT 430	.07	-.18		-.21		.08	.44		-.50		-.41			.07		.05	.13				.73	.08	-.08	-1.93		.58		
	MGT 444		-.28		.09		-.04	-.08				.15	-.80	-.43			.03	-.31				-.33		.65			1.12		
	MGT 480	-.20	-.13		.26			.48				-.32	-1.40				-.51	-.09						-.85				-.80	
	MK 301	.13	.18	.12	-.11	.62	-.35	.07	-.54	-.43	-1.17	.03	.22	-.22	.11	.14	.05	.32	.67	-.37	-.73	-.17	.36	.09	-.65	-.77	-.05		-.83
	MK 430	-.26	.32		.14	.27	-.64	-.05				-.49			-104		-.36					.91	.37	-.05			1.09	-.35	
	RE 301	.03	.16		-.02	-.17	-.03	.04	-1.31	-.32	-.79	.07		.10	-.42	.49		.10	1.13		.45	-.34	.28	.34	-.29		-.27	.10	
	RE 410	.01						-.50				-.16					-.25	-.71					-2.37	-.10				-.48	
Communications	JOUR 101	-.05	-.18	.84	-.07	-.15		-.40	-1.11	-.22	.47	-.84	-.27	-.38	.12	.16	-.23	.11			.30	-.43		.13	-.15	-.67	-.38	-.53	.47
	JOUR 308	.20					-.28	-.96	.25	.05	-.97			-.13	.28		-.62	-.21			.46	.37		-.52					
	JOUR 400	-.40	.34			.37	.14			.31		-.33		-.37	-.02		.53	.30			1.17	.47	.50	.41	-.63		-.80	-.47	-.10
Computer Science & Systems Analysis	IS 301	.16	.20	-.18	.08	.33		.09		.28		.005	.49		.29	.41	-.07	.17	.34	.30		.09	-.03	.08	.38		-.96	.48	-.07
	IS 302		.05	.59		-.68		-.19		-1.08		-.18	.44	-1.67		-.32	-.27	-.65				.23	-.16						

		Undeclared	Accounting	Anthropology	Business Educ.	Biology	Criminal Justice	Economics	Early Childhood Education	English	Elementary Education	Finance	General Studies	History	Journalism	Mathematics	Management	Marketing	Medical Technology	Music	Nursing	Political Science	Psychology	Real Estate	Secondary Education	Special Education	Sociology	Studio	Social Welfare
Education	BED 236	-.04	-.06		.04	.73	-.18	-.11		.52	-.74	.30	-.62	.53	1.19		.14	.15		.94		.22	.42	-.04	-.68	-.42	-2.31		
	BED 450	.17	.45		.35					.36	.29	.36		.08	1.42		.23	.30				-.66		-.15	-.48			-.19	
	ECI 346	.03	.29						-.04	-.24	.14			-1.11			1.01				-.27			.48	.70			-3.46	
	DS 092	.78	.48	.16	.78		.67	.49	.15	.52	.13		1.37		1.10	.70	-.17			.34		-.25	.75	1.25	.38			-1.05	.60
	FED 305	-.04	-.06	.19	.14	.52	-.32	-.32	.13	.34	-.12	.29	.67	.87	.24	.35	.22	.29	-.29	-.20	-.02	.09	.06		-.07	.05	-.29	-.13	.13
	FED 310	-.04		.37	.10	.52	.16	-.32	.05	.17	.009		.08	.09	-.15	.04	-.28	.30		-.09	.06	.60	.31		.21	.07	-.12	-.09	.37
	FED 496		.22		.14	.22	-.13		-.06	.27	-.10			.28	.29	.03	-.92	-.36		.30	.29	-.10	.23		.10	-.12	-.04	-.06	-.89
	HPRS 101	.33	.48	.19		-.99	-.54	-.65	.10	-.61		.15	-.64	-.63	.10		-.25		-.29	.27			-.17	.23	.03	-.20	-.42	-.39	
	HPRS 344	.50	.16		-1.13				.14		.22														.52	.28			
	HPRS 345	.28	1.11						1.25	.95	1.19			1.80	-4.48						1.45				1.41	1.07			
	LSM 436	-.11							-1.01		-.72			-3.37											-.11	-.39		.49	
	PED 101	-.49	.11	-.13	-.55		.07		-.14	.16	-.15			-.19	-.11	.09	-.16	-.30	-.21	-.08	-.15	.34	.21		.37	.09	-.53	-.49	
	PED 344	.80	-1.18	.57			.46		-.03	1.67	.25				1.11						.19				.98	.31	.12		
	PED 345	.70	1.67	-.62			-.53		.57	-.42	.57	.48	.96	.41	1.60		.60				.26		.60		.11	.68	.48	1.20	
	SPE 401	.44	2.42		.50				-.12	.45	-.03			.50							.20		.69		.38	.12			.51
	ART 179	-.31	.61	-.37		.10	.26	.07	-.58	-.16	-.07		.17	.22	-.17	-.28			.08	-.83	-.19	-.32	-.13	.29	.14	.44	.60	.07	-.96
	DRAM 304	-.07	-.34	-.49	.42	.87		-1.78		.06	-.85		-.42	.22	.08	1.28	.88	1.53		-.20	-.32	-.21			.42	-.13	-.28	-.25	
	MUS 106	.56	.63	-.03					-.07	.22	.35		.33	.64	.26	.62				.32	.46		-.06			.50			
	MUS 107	.07		-.37		-.17				-.40					-.34		-.19			-.24								.15	
	MUS 108	-.56	.15			.99		.10	-.04	-.06	-.11			.39	.42	.08	.35	-.10		.15	.33		.17		.23			-.09	
	MUS 393	.25	.29	-.04	.40	.34	.33	.12	-.25		-.09	.23	-.04	.25	.10	.28	.15	.24	.14	1.16	.03	-.03	.03	.04	.21	-.33	.04	-.07	.09
Foreign Languages	FR 101		.14		1.32	.03		-.16	-.71	-.15	.2[illegible]		-.08	.17	-.05	.19	-.16	-.03	-.41	-.26	.59	-.23	-.11	.07	-.79	-.50	-.25	.09	-1.28
	FR 102	.51		.10	.14	.15	.23	-.03	.28	-.12	.03	.58	.05	.08	.14		.77		.61	-.41	.37	.04	.08	-1.96	-.07	-.43		.33	-1.37
	FR 201	.05	-.98	-.06		-.09		-.04		-.10	-.23	1.78	.27	.15	-.03	.29			.87	-.22	-.20	.19	-.11		.34	.25	.31	-.05	-.53
	FR 202	-.10	-.88	-.21		-.05	-.63	-.45	.38	-.14	-.07		.67	.13	-.13	-.39				.73	.99	-.26	-.04		-.37		-.19	-.28	-.54
	GER 101	.17	.71	-.55		.31	-.54	.29		.44	.33	1.26	.30	-.40	.21	.33	1.19	.17	.72	-.29	.45	-.32	.02		-2.30	-.14	.39	-.36	
	GER 102	.17	-.55	-.06		-.18	-1.85	.09	-.26	-.29	-.57	-.21	-.31			-.14	.40			-.36	.70	-.84	.07			-1.05	-.45	-.05	
	GER 201	-.44	-.68	-.74		-.08		-.21	-.22	-.50				-.50	-.40	-.53	1.35			-.72	-.32	-.61	-.02				-.78	-.86	
	GER 202	.40	1.07	.14		1.28		-.12	-.79	-.34		-.76		-.58	-.47	1.50		.44		-.28	.70	-.69	-.22				-.78	.40	
	LAT 101	.64	-.29			.42		.48		-.20	.34		.35	.21	.13	.47		1.00		.77			-.35		-.30	.41	-.81		
	RUS 101	1.08	1.59	.15		.81	.53	-.15		.49	-1.39	1.67	1.10	.49	.39	.91	1.59		.62	-.39		.54	.67		-2.70	.60	.57	1.02	
	SPAN 101	.17	-.22	.06	.79	.24	.15	.10		-.03	-.13	-1.21	1.19	-.37		-.64	.20	.08	.38	-.37	-.16	-.16	.03		-.20	-.91	.06	-.27	-.68
	SPAN 102	-.07	-.13	.03	1.06	.18	-.59	-.30	-.39	-.07	-.29			-.12	-.12	-.63	.19	-.34	-.68	.56	-.07	-.07	-.27		-.87	-1.10	-.14	-.27	-.87
	SPAN 201	-.39		-.22		.31	-.74	-.90		-.20	-.55		.14	-.55	-.30	-.12	-1.53	.83			-.24	-.31	-.21			-.74	-.39	-1.37	
	SPAN 202	-.25	.17	-.41		.40	-.18	.07		-.10	-.70		-.46	-.33	-.24	.11	-.78	-1.86			-.38	-.33	-.33		-.24	.07	-.06	-1.88	
Health Professions	HA 401	.16	-.39			-1.85											.74		-2.41										
	NURS 101	.47			.71	-.73	.50			.20							-1.02						-.07						1.35
	NURS 102	-1.52								.24											-.26		-.83						
	NURS 111	-.34			-.18	-.35	-.08										-1.19				-.009		-.23			-.40	.32		-.37
	NURS 112	.70			-.34	.22				-.13													.41						1.25
	NURS 211	.24			-2.25																.07		-.12						
	NURS 212	.21								.87											.23		.32						
	PT 304				.42																		1.27						
	RT 245	.70	.30								-1.25										-.05		-.09						
Letters	ENG 111	.03	.06	.03	-.18	.10	-.05	-.13	-.22	.31	.09	-.14	.05	-.18	.21	.04		.02	-.03	-.19	-.02	-.06	.15	.09	-.13	-.18	.05	.03	-.07
	ENG 112	-.09	-.05	-.15	-.04	.01	-.06	.07	-.38		-.25	-.15	-.18	.04	.21	.05	-.07	-.13	.10	-.10	-.08	.05	-.09	-.12	-.06	.31	-.13	.06	-.20
	ENG 201	.02	-.05	.22	-.05	.13	-.11	.08	-.17	.38	-.26	-.02	-.05	.09	.15	.14	-.06				.03	.01	.05	-.11	.08	-.16	.17		-.26
	ENG 202	-.03	-.16	-.04	-.33	.10	-.07	-.14	-.33	.25	-.27	-.26		-.10	.06	-.18	-.19	.16	.32	-.11	-.06	.07	-.14	.11	-.04	-.23	.11	-.06	-.25
	ENG 211		-.07	-.20	-.54	.35	-.15	-.13	-.92	.28	-.34	-.12	.08	.03	-.04	-.12	-.09	-.23	-.03	-1.01	-.16	.19	-.05	.09	.10	-.16	-.08	-.22	-.28
	LING 301	.66		-.12		.14		.22	-1.30	.27		.17		.47									1.43		-.15	-.10			
	PHIL 201	.08	.009	-.06	.03	.23	.10	.29	-.12	.19	.03	.21	.09	.19	-.02	.23	-.05	-.21	.05	-.30		-.05	.07	-.26	-.22		.29	.27	.04
	PHIL 301	-.06	.07	-.07	-.13	.19	-.20	-.39	-1.25	-.17	-.15	-1.32	-.47	.15		.24	-.05	-.16	-.18		.10	-.19	.02	-1.88	-.33	-.31	.03	-.24	.36
	SPCH 101	.04	-.78	-.38	.07	.43	.63	-.38	-.40		-.21	-.42	.07	.64	.15	.29	-.22	.15			.48	-.28	-.08		.12	-.35	.18	-.21	.55
	SPCH 150	-.05		-.30	-.05	.14	-.12		-.20	-.04	-.28	-.05	-.17	.12	-.09	-.46	.04	-.08	-.63	-.16	-.24	-.32	-.18	-.37	.03	-.11	-.13	-.13	-.06
Mathematics	MATH 102	.25	.15	.44		.43	.13	.09	.15	.07	-.25	-.74	.03	.15	-.02	.47	.72	.26	.70	-.31	.18	.10	-.06	-.37	-.16	-.09	-.24	-.03	.16
	MATH 105	.22	.32	.08	.35		.12	.29		-.10	-.08	.47		-.09	.13	.59	.47	-.20	.92	-.19	.38	.32	.13		.02	-.26	.06		-.13
	MATH 107	-.02	.33	-.19	-.19	.39	-.24	-.17	-.73	-.29	-.55	.84	-.23		-.46	.45	.36	-.09	.61	-.32	.29	-.33	.01	.22	.16	-.09	-.19	.22	-.15
	MATH 115	.30	.47	-.34	-.47	.37	.13	.74	-.45	-.23	-.18	-.20	.37	-.11		.65	.10	.44	.51		.36	.03		.19	.77	-.09		-.29	
	MATH 125	-.11	.07	.09	.16	-.02	-.26	-.14	.42	-.23	-.34	-.31	-.25	-.50	-.30	.43	.24	-.20	.72		.04	-.42	-.31	-.55	.25		-.08	-.70	.36
	MATH 211	-.07		-.14	-1.55	-.21	-.25	-.24	-.73		-.67	.44	-.08	-.23	-.64	.30	-.36	-.17	-.16	.16	-.41	-.70	-.36	-.41	.05	-.61	-.11	-.06	

		Undeclared	Accounting	Anthropology	Business Educ.	Biology	Criminal Justice	Economics	Early Childhood Education	English	Elementary Education	Finance	General Studies	History	Journalism	Mathematics	Management	Marketing	Medical Technology	Music	Nursing	Political Science	Psychology	Real Estate	Secondary Education	Special Education	Sociology	Studio	Social Welfare
Physical Sciences	ASTR 101	.23	.28	-.15	.22	.43	-.10			.08	.04	.29	-.19	.15	.19	.22	.13	.23	.22	.20	-.17	.21	.13	-.49	.44	.03	.24	.26	-.39
	CHEM 111	-.08	-.16	1.00	-2.78	.19	-.32	-.47	-1.55	-.11	-.67	.11	-.45		-.41	.27		-.17	.19	-.84	.15	-.45	-.02		.32	-.44	-.94	.29	-.19
	CHEM 112	.27	-.59	-.60		-.03	.46	-.55		-.42		-.15	.32	.07	.55	.09	-.44	-.15	.14	-1.45	-.11	-.80	-.08	-.55	-.32	-.80		-.39	
	CHEM 113	-.02	-.32	-.63		-.24	-.42			-.39		-.16	1.18	-.65		-.09		-.72	-.19		-.59		-.39	2.14	-1.01	-.10		-.60	-.32
	CHEM 116	.12	-.14	-.25	-.53	.16	.35	-.19	-.37	-.36		.79	-.51	-.73	-.19	-.04	.08	.46	.22	-.95	-.36	-.17	-.07	.41	-.55	-.23	.34	-.22	-1.22
	CHEM 117	-.15	-.36	-.31		-.07	.73			-.49				-.72	-.31	-.10	.37	-.66	.26	.57	.49	-1.72	.21	-.98	-1.16	-.30	-1.54	.10	-.64
	CHEM 118	.04	-1.34	.11		-.16	-.68	1.12		-.42		-.08		-.43		-.09	-.51		-.03		-.75		-.59		-.93	.31		.64	-.35
	CHEM 240	-.03	.07	.69		-.09	-1.10	.50		.71				-1.61		-.56	.34		.22		-.12	.53	.12	1.08	-.21	.75			
	GEOL 101	-.10	-.11	.16	-.26	.29	-.17	-.28	-.55	-.22	-.32	.14	-.08	-.18	-.34	.30	-.13	.02	.65	-.34	-.07	-.43	-.11	.19	-.25	-.35	.05	-.27	-.22
	GEOL 102	-.22	-.14	.26	-.33	-.21	-.31	-.19	-.81	-.33	-.41	-.30	.11		-.15	.05	-.30	-.33	1.26		.54	-.17	-.15	-.23	.07	-.62	-.09	-.17	-.22
	PHYS 101	.21	.20	-.47	.93	.26	.21	.11		-.20	-.57	-.13	-.29	-.20		.74	-.23	.33	.25	-.20	-.10	.25	-.03	.97	-.32	.27	-.26	-.11	.29
	PHYS 102	.15	-.05			.36	-.50	.17		.10		-.72	.20	.11		.42	.09		.52	-1.04	.20	-1.30	.36		.29	-.26	-1.20	.26	.87
	PHYS 250	-.83	-.56		-.15	-.03	.50			-.49	-2.31		-.17						.74		-.24		-.10				-.47		
Psychology	PSY 201	.03	-.06	.02	-.15	.32	.06	-.05	-.36	-.07	-.20	-.02	-.01	-.22	-.18	.07	-.03	-.05	.16	-.37	.04	-.05	.27	-.13	-.08	-.20	-.14	-.22	-.11
	PSY 300	.11	.09	-.75		.18	-1.19	-.62		.34	-.62	-.56	-.77		.32	.53	.80	.20		-.18	.53	-.15	-.04	2.92	-.25	-.62	-.10	-1.31	-.12
	PSY 301	-.23	-.25			.15		.42		-.84	-.97				.19		.29	.58			.82	.66		.18	-.80		.24		
	PSY 313	-.06	.32	-.04		.67	-.04	.07	-.07	.27	-.34	-.54	.29	-.72	.40	.03	.24	-.13	1.02	.67	.32	.44	.24	.65	-.32	-.39	.24	1.20	.12
	PSY 314	-.04	.03	.13	.23	.14	-.17	.13	-.76	-.32	-.43	-.51	.11	-.14		-.05	-.20	-.51		-1.54	-.02	.21	.18	-.61	-.29	-.28	.12	.27	-.27
	PSY 358	.15	.04	.41	-.75	.12	.14	.33	-.05	.20	-.20	.39	-.10		.07	.25	-.13	.41	.33	.21	.08	.08	.25	-.35	-.03	-.11	-.03		-.03
Social Sciences	ANTH 102	.08	-.05	.22	.07	.30	.01	.10	-.21	.16	-.23	-.25	-.07	.31	-.03			.17	.67	.32	.16	.35			-.28	-.38	.07	.02	-.05
	CJ 301	.20	.19	.08		.49	.16	-.13	-.49	-.44	-.45	.36	.08	.52	-.28	.39	-.04	-.16	.12		.32	.18	-.19	-.16	.39	-1.05	.09		.07
	EC 360	-.05	.10			-2.59	-.03	.40				-.78	1.73	.04	-.72	-.15	.29	.37		-.57	.72	-.28	-.11	.29	.59	-1.16	.12		.04
	GEOG 101		-.10		-.58	-.28	-.14	-.37	-.61	-.33	-.39	.13	.28	-.05	.13	-.32	.08	.18			.09	.07	-.16		-.19	-.84	.13	-.21	-.08
	GEOG 103	-.11	.09	-.55	.14		.08	.03	-.27	-.47	-.28	.15	.23	.28	-.09	.12	.03	-.08	-.50	-.39	.12	-.10	.22			-.31	.14	-.09	-.27
	GEOG 104	-.13	.19	.07	-.17	1.00	-.36	-.19	-.39	.07	-.32	.08	-.04	.02	-.12	.27		-.08		-.78	-.11	-.09	-.18	-.14	-.05	-.53	-.09	.13	-.25
	GEOG 350	.25	.09	-.38		-.45		-.21	-.44	-.61	-.88	-.12		-1.08		.30	.34	.37			.96	.16	-.34	-.06	-.53		-.63	-1.01	-.22
	HIST 111	.18	.26	-.05	.44	.13	-.19	.36	-.25	.15	-.31	-.05	.15	.64	.04	.07	.02	-.38	.63	-.30	.06	.06		-.23	.15	-.07	.05	-.11	.25
	HIST 112		-.07	.15	-.09	.18	-.10	.19	-.36	.05	-.30	.03	-.08	.47	.05	-.16	-.02	-.25	.23	-.24	-.20	.04	-.08	-.27		-.40	-.08	-.09	-.13
	HIST 113	.03	.007	.07	-.18	.17	.06	.20	-.12	.08	-.37	-.16	-.04	.55	.06	.16	-.02	-.04	.21	-.11	.02	.21	-.03		.07	-.13	.02	-.10	.03
	HIST 476	-.04	.54				-.07	.28	-.35	-.31	-1.27			.37	.81		.41					.82	1.00	.70	-.04	-.48	-.09	.32	-.11
	POLS 101	.18	.13	.12		.21	.15	.21	-.23	.10	-.29	.03	.12	.37	.14	.19	.14	.11	.19	-.24	-.01	.33	.06	.02	.15	-.15	.17	-.04	.15
	POLS 201	.09	-.42	-.32		.36	-.66	.20		-.13	-.46	.43	-.51	-.18	-.35	-.17	-.36	-.73	-.35	.55	-.57	-.06	-.47	-.54		-.84	-.64	-.22	-.03
	POLS 414	-.02	.17				-.02	.11		.31	.31			.63	.30	.61	-.24	1.35	-.09			.06	-.04	-1.11	.04		.07	.75	-.14
	SOC 201	.02	.06	.09	-.20	.13	.14	.07	-.29	.10	-.33	-.08	-.11	.19	.19	.09	.02	.12	.12	.19	.10	.04	.10	.15	-.09	-.10	.31		.30
	SOC 202	-.09	-.05	.19	-.23	.39	.28	-.13	-.46	.15	-.18	.25	.07	.19	-.20		-.13	-.11	.57	-1.11	-.40	.12	.06	-.31	-.17	-.09	.13	-.57	.29
	SOC 308	.25	.14	.42	-.16	.60	.25	.28	-.08	.12	-.03	.50	.52	.34	.30	.62	.20	.41	.29		.24	.26	.38	-.60	.36	.07	.35	.27	.26
	SOC 400	-.16	.05				-.17	-.11	-.11	.32	-1.39			-.17	.25	.22	-.45	-.30		1.08	.05	.67	.05	-.94			-.09		-.10
	UL 301	-.27	1.00	-1.57			-.14	-.16	-.54					-.75	.37			.23				-.08	-.78		-.74		-1.19	-.16	.07
	UL 333	-.22				1.04	.25				-1.64				-.22		.76				.16		-.23			-.27	-1.20		.19
	UL 361	.49	.29				-.01		1.40				1.08		.80		.08	.19	-.12		.40		.26	1.55		.61	-.45		.30
	UL 494	.36	-.68				.11							-.47				.67					.17						.18
	UL 495	-.11	-1.01				-.10							-.40				.96					.11						.04
Health Svcs & Para-medical Tech.	MH 101	-1.49	-.49	.21		-1.53	1.10			-.37	-.21			.47		-.18			-.09		-.13		.27		-.34	-.59	.82		-.89
	MH 102			.26			.39			1.05						.77					-.18		1.06		.37		1.03		.82

SOURCE: Appendix A of Prather and Smith (1976b)

Analysis of Major Field by Course Discipline Type

Chart 3 indicates how the students from various major fields perform in the 38 different course areas, from accounting (AC) to urban life (UL). As in the previous charts, the coefficients are regression estimators and may be interpreted as the weight, expressed in the proportion of a letter grade, that a particular course area impacts on a certain major field. The coefficients gauge average performance for students in a major field in that particular course area relative to performance in other areas. For example, Philosophy majors, on the average, do much better in management courses (+1.71) than they do in biology (-1.18). Highlights may be summarized as follows:

* Accounting (AC); although all course disciplines registered more negative than positive weights in accounting, students from the course discipline of Business and Commerce performed better of all disciplines, while the course discipline of Social Science registered the worse performance in accounting courses.

* Art (AR); the course discipline of Education recorded several positive coefficients, while the other course disciplines recorded mostly negative weights with few or no positive coefficients.

* Actuarial Science (AS); students taking actuarial science courses were represented primarily by the course disciplines of Business and Commerce and Mathematics, in which both disciplines registered negative impacts in actuarial science.

* Business Education (BED); the discipline of Business and Commerce performed notably well in Business Education courses, while the course discipline of Computer Science and Systems Analysis recorded a notably negative weight. Other disciplines recorded an approximate balance of negative and positive coefficients.

* Biology (BIO); while Biology courses had a rather decided negative impact on all academic disciplines, the discipline of Biological Science registered a much lower negative weight than did the other disciplines.

* Business Law (BL); academic disciplines that registered notable positive weights in Business Law courses were: Community Planning; Area Studies; Business and Commerce; Information Systems. Disciplines that registered notably negative weights were: Physical Sciences; Social Sciences; and Urban Studies. Other academic disciplines registered a relative balance of negative and positive weights.

* Chemistry (CHEM); all academic disciplines recorded notably negative weights in chemistry courses. However, the discipline of Education recorded both the highest percentage of negative weights within a discipline and also the largest negative coefficient.

- Criminal Justice (CJ); notable negative coefficients were registered in the academic disciplines of Business and Commerce; Communications; Education; Health Professions; Social Sciences; Urban Studies and two-year Business and Commerce. The discipline of Community Planning recorded a notably positive weight and other academic disciplines recorded a relatively balanced distribution.

- Decision Mathematics (DM); all academic disciplines registered notable negative weights in decision math courses; the best performance was found in Business and Commerce and the worse performance was recorded in Urban Studies.

- Economics (EC); the academic discipline of Community Planning recorded a notably positive coefficient. Disciplines recording notably negative coefficients were Education; Foreign Languages; Social Sciences; Urban Studies and all two-year disciplines.

- Educational Curriculum and Instruction (ECI); all academic disciplines recorded notably positive weights. The discipline recording the largest positive coefficients were Business and Commerce, while the discipline of Education recorded the smallest positive coefficients.

- English (ENG); the academic discipline of Community Planning recorded a notably positive weight. Notably negative weights were recorded in the disciplines of Area Studies; Business and Commerce, Education, Physical Sciences, Urban Studies and all two-year disciplines.

- Foundation of Education (FED); all academic disciplines on the average recorded more positive coefficients than negative. The largest positive weight was recorded in the discipline of Communications, and the smallest positive weight was found in the discipline of Education. However, no negative weights were recorded in Education.

- Finance (FI); notably negative coefficients were recorded for the following academic disciplines: Business and Commerce; Education; Fine and Applied Arts; Health Professions; Physical Sciences; Social Sciences; two-year Business and Commerce. No notably positive coefficients were recorded.

- French (FR); all academic disciplines registered notably negative weights in French courses with the exception of Foreign Area Studies, which registered a positive weight.

- Geography (GEOG); the disciplines of Community Planning and Foreign Area Studies recorded notably positive coefficients, while all other academic disciplines recorded on the average more negative than positive weights.

- Geology (GEOL); the same as with geography, all academic disciplines recorded on the average more negative than positive coefficients with the exceptions of Community Planning and Foreign Area Studies, which both registered notably positive weights.

- German (GER); the academic discipline of Community Planning recorded a notably positive coefficient; all other disciplines recorded notably negative weights, with the discipline of Information Systems recording the largest negative coefficient.

- * History (HIST); all academic disciplines with the exception of Community Planning registered only negative weights in history courses. The discipline of Urban Studies recorded the largest negative coefficient and Business and Commerce recorded the lowest negative coefficient.

- * Health, Physical Education, Recreation and Safety (HPRS); all academic disciplines recorded notably positive coefficients in HPRS courses. Comparatively, there were no exceptionally large or small coefficients among disciplines.

- * Insurance (INS); the academic discipline of Information Science and Letters recorded notably positive coefficients. Notable negative weights were recorded in Business and Commerce, Communications, Education and Psychology.

- * Information Systems (IS); notably positive weights were registered in the disciplines of Information Systems and Health Professions. The discipline of two-year Business and Commerce recorded a relative balance between negative and positive weights. All other academic disciplines recorded notably negative coefficients.

- * Journalism (JOUR); all academic disciplines with the exception of Social Sciences and Community Planning recorded notably negative weights in journalism courses. The discipline of Social Sciences registered a relatively balanced weight of negative and positive coefficients, while Community Planning recorded a notably positive weight.

- * Mathematics (MATH); the academic discipline of Community Planning recorded a notably positive weight, but all other disciplines recorded notable negative coefficients in mathematics courses. The largest negative coefficient was registered in the discipline of Social Sciences.

- * Management (MGT); academic disciplines recording notable positive weights were: Business and Commerce; Community Planning; Physical Sciences; and Letters. Academic disciplines recording notable negative weights were: Education; Fine and Applied Arts; Foreign Languages; Social Sciences, Urban Studies, and two-year Business and Commerce. All other academic disciplines registered a relative balance of negative and positive coefficients.

- * Marketing (MKT); academic disciplines registering notable positive coefficients were Community Planning and Psychology. Notable negative coefficients were recorded in the disciplines of Business and Commerce, Education, Fine and Applied Arts, Foreign Languages, Health Professions, Letters, Mathematics, Social Sciences and Urban Studies. The two-year program of Business and Commerce and Health Service Curriculum also registered notable negative weights in marketing courses.

- * Music (MUS); excepting the academic discipline of Fine and Applied Arts, all disciplines recorded a notable positive coefficient in music courses. The discipline of Business and Commerce registered the largest positive coefficient.

- Nursing (NURS); the academic disciplines of Biological Sciences, Business and Commerce, Education, Fine and Applied Arts, Foreign Languages, Letters and Health Service Curriculums all recorded notable negative weights in nursing courses. Positive weights were registered by the disciplines of Psychology and Social Sciences. Other disciplines recorded a relatively balanced distribution of negative and positive weights.

- Philosophy (PHIL); excepting the discipline of Community Planning, all academic disciplines recorded notable negative weights in philosophy courses. The largest negative coefficient was found in the area of Urban Studies.

- Physics (PHYS); all academic disciplines recorded notable negative coefficients in physics courses. The discipline of Biological Sciences recorded the largest negative weight.

- Political Science (POLS); excepting Community Planning, all academic disciplines recorded notable negative coefficients in political science courses. The largest negative weight was found in the discipline of Fine and Applied Arts.

- Psychology (PSY); academic disciplines recording notably positive weights in psychology courses were Community Planning, Biological Sciences, Health Professions, and Letters. Notable negative weights were recorded in the disciplines of Foreign Area Studies, Information Systems, Education, Fine and Applied Arts, Social Sciences and Urban Studies.

- Real Estate (RE); notable positive coefficients were found in the academic disciplines of Community Planning, Business and Commerce, Information Systems and Physical Sciences. All other disciplines excepting Health Professions and General Liberal Arts, registered notable negative weights. Health Professions and General Liberal Arts recorded a balanced proportion of negative and positive weights.

- Sociology (SOC); academic disciplines recording notable positive coefficients were Community Planning, Health Professions, Physical Sciences and General Liberal Arts. Disciplines recording notable negative weights were Foreign Area Studies, Education, Fine and Applied Arts, Social Sciences, Urban Studies, two-year Business and Commerce and Health Service Curriculum.

- Speech (SPCH); notable positive weights were recorded in the academic disciplines of Community Planning, Communication, Education and Health Professions. The only discipline registering a notable negative coefficient was Urban Studies.

- Spanish (SPAN); academic disciplines recording notable positive weights were Foreign Area Studies and Foreign Languages. Notable negative coefficients were recorded in the disciplines of Business and Commerce, Fine and Applied Arts, Social Sciences, Urban Studies and two-year Business and Commerce.

- Special Education (SPE); notable positive coefficients were recorded in the academic disciplines of Business and Commerce, Fine and Applied Arts and Health Professions. Notable negative coefficients were found in the disciplines of Communications, Education, Social Sciences and two-year Business and Commerce.

- Urban Life (UL); Academic disciplines recording notable positive coefficients were Community Planning, Biological Sciences, Business and Commerce, Health Professions, Psychology, General Liberal Arts and two-year Health Service Curriculum. Notable negative weights were found in the disciplines of Education, Fine and Applied Arts, Letters, Mathematics and Urban Studies. Other disciplines registered a balanced distribution of negative and positive weights.

C

ESTIMATED LETTER GRADE IMPACT BY COURS

COURSE TYP

Table No.		AC	ART	AS	BED	BIO	BL	CHEM	CJ	DM	EC	ECI	ENG	FED	FI	FR	GEOG	GEO
	Community Planning:																	
1	Community Development	2.16				.79	1.02	-.01	1.28	-.74	1.07		1.19				1.05	.6
	Area Studies:																	
2	Foreign Area Studies				1.04	-2.84		-.07			-.32		-1.01			.21	.73	.5
	Biological Sciences:																	
3	Biology	-.45	-.37		.25	-.16	.38	-.30	.32	-.41	.17	.71	.02	.58		-.19	-.24	-.1
	Business & Commerce:																	
4	Accounting	-.22	-.14	-.49	.51	-.64	.27	-.41	-.03	-.02	.17	.29	-.16	.37		-.22	-.09	-.2
5	Actuarial Science	.14		-.72	.36		.03	.15		.10	.19		-.13	-.78	-.50		.06	-.0
6	Economics	-.22		-.78		-.46	.14	-.04	-.10	.08	.32	1.78	.04	.39	-.16	-.28	-.11	-.1
7	Finance	-.36	.20	-.51	.45	-.33	.19	.08		-.06	.11		-.15	.25	-.07	.45	.14	-.1
8	Insurance & Risk	.004		-.56	1.23	-.90	.67	.31	.46	.17	.49	.56	.20	-.51	.24	-.17	.33	.2
9	Management	-.66	-.22	-.79	.24	-.90	-.10	-.39	-.36	-.47	-.13	.76	-.35	.13	-.58	-.27	-.31	-.4
10	Marketing	-.59	-.23	-.52	.31	-.80	-.14	-.32	-.39	-.39	-.14	-2.22	-.24	.27	-.57	-.15	-.31	-.3
11	Real Estate	-.44	-.10		-.03	-.59	.10	-.15	-.51	-.37	-.08	.26	-.18		-.52	-.79	-.31	-.3
	Communications:																	
12	Communications	-.24	.06		.23	-.65	-.11	-.75	-.25	-1.30	-.23		.12	1.29	-.45	-.33	-.22	-.3
13	Journalism	-.48	-.47		.27	-.77	-.06	-.34	-.22	-.52	-.11	.91	.14	.46	.19	-.15	-.22	-.3
	Computer Sci & Sys Analysis:																	
14	Information Systems	-.68	-1.58		-.40	-.57	.83		.26	.12	-.25		-.42	.61	.44	-.96	-.36	-.3
	Education:																	
15	Art Education		.27			-.84		-.18					.12			-.60	-.28	.7
16	Business Education	-.98	-.32		-.002	-1.16	-.32	-1.66		-1.02	-.37	.17	-.50	.23	-.66	.19	-.67	-.7
17	Early Childhood Educ.	-.43	-.13		-.43	-1.02		-.73	-.71	-.90	-.64	.21	-.43	.14		-.36	-.60	-.8
18	Elementary Education	-1.38	.14		.31	-.95		-.25	-.56	-.13	-.45	.35	-.15	.18	-.46	-.02	-.30	-.2
19	Physical Education	-.73	-.05		-.24	-.62	.24	-.74	-.58	-.98	-.40	.03	-.19	.04		.28	-.77	-.4
20	Secondary Education	-.84	-.27		.55	-.57	-.83	-.49	.08	-1.15	-.08	.46	-.05	.38		-.21	-.02	-.1
21	Special Education	-.87	-.06		.05	-.83	.31	-.50	-.58	-.72	-.39	.15	-.23	.15		-.31	-.58	-.5
	Fine and Applied Arts:																	
22	Art	1.59	.21		.28	-.16		.43			.21		.28	.30		.15	.03	.1
23	Music	-.81	-1.31		.38	-1.22	-.19	-1.33		-1.76	-.34		-.78	-.27		-.91	-1.57	-.9
24	Studio	-.68	.02		.42	-.36	.09	-.16	-.22	-.45	.21	-.11	.004	.12	-.81	-.16	-.31	-.3
	Foreign Languages:																	
25	French	-1.19	-.42			-.33	.68				-.59	.12	-.28	-.30		-.02	-.84	-.7
26	German	-1.48	-.42		-.35	-.28		-.37		-2.55	-.31	.37	.07	.21		-.01	-.11	-.3
27	Spanish	-1.95	-.42		.22	-.63		-.70		.35	-.38	.35	-.22	.20		-.16	-.71	-.7
	Health Professions:																	
28	Community Hlth Nutrition	-.60	.94			-.43		-.40		-1.18	-.28		.21	-.21		-.74	.55	.3
29	Health Administration	-.77	-.30		-.25	-1.31	-.61	-.79	-.72	-.70	-.47		-.68	.70	-.84		-.56	-.4
30	Medical Technology	.17	-.38		.77		1.15	-.15	.39	-.26	.26	.92	.14	.72		.44	-1.14	.3
31	Nursing		-.33		-.09	-.27	.51	-.41		-1.01	.23	.54	.10	.54		.40	-.02	-.1
32	Physical Therapy	.55	-.57			-.64		-.57	-.26	-2.68	.46	1.10	.22	.34			.62	-.3
	Letters:																	
33	Classics					-.48							-.31			-.26	-1.13	-.3
34	English	-.56	-.33	.12	.05	-.47	-.04	-.48	-.15	-.63	-.23	.34	.04	.36	.21	-.43	-.50	-.4
35	Philosophy	.14	-.18		-.10	-1.18	.96	-.75	.16	.49	.32		.03	.80	.58	-.45	-.45	
	Mathematics:																	
36	Mathematics	-.17	-.67	-1.00	.21	-.63	-.16	-.41	.22		.21	.40	-.30	.14	-1.54	.30	-.16	-.1
	Physical Sciences:																	
37	Chemistry	-.30	-.65			-.39	.33	-.12	-.32	-.32	.35	.58	-.20	.31	-.38	-.20	.07	-.1
38	Geology	-.34	-.74		.83	-.16	-1.22	-.19	.78	-.17	-.18	-.73	-.02	.25		-1.67	.21	.2
39	Physics	-.63	.83		.28	-.31	.44	-.53		.44	-.15		-.41	-.95			-.68	-.0
	Psychology:																	
40	Psychology	-.22	-.31		.30	-.50	.09	-.22		-.03	-.02	.47	-.04	.51		-.18	-.24	-.1
	Social Sciences:																	
41	Anthropology		-.52		-.95	-.33		-.66	-.16	-.62	.05	.30	-.04	.16		-.36	-.14	.0
42	Community Relations		-.22		.77	-.77	.34	.39	-.12	-.29		.73	.30	.97				.2
43	Criminal Justice	-.65	-.60		.04	-.97	-.03	-.40	-.20	-.53	-.35	.64	-.32	.16		-.32	-.29	-.3
44	Financial Security Prog.	-2.44			.19	-1.61	-.38	1.11	-.89	-1.73	-.46		-1.15	.09	-1.26		-.69	
45	Geography	-1.20	-.42		-.56	.42		-.04	.19		-.21	.60	.07	.70		-.31	.41	.2
46	History	-1.12	-.14		.05	-.72	-.07	-.54	-.15	-1.16	-.19	.11	-.15	.30	-.94	-.23	-.24	-.3
47	Housing Admin.	-1.41					-.62			-1.08	-.66		-.86				-.89	-.9
48	Land Development	-.38	-.42			-1.12	-.01		.09	-.38	.004		.15		1.81			.2
49	Political Science	-.76	-.34		-.11	-.96	-.07	-.71	-.21	-.93	-.24		-.21	.12	-1.01	-.44	-.32	-.4
50	Social Welfare	-.26	.22		.15	-.58	.26	-.41	.10	-.49	-.08		-.08	.31	-2.24	-.86	-.27	-.3
51	Sociology	-.29	-.02		-.05	-.82	.04	-.62	-.09	-.85	-.18	.38	-.14	.04	-.48	-.33	-.22	-.1
	Urban Studies:																	
52	Urban Administration	-.73	-.97		.27	-.73	-.10		-.38	-.79	-.23		-.23			-.08	-.23	-.4
53	Urban Economics	-.93			1.51	-.75	.05		-1.07	.15	.19		.20				.49	
54	Urban Government	-1.66				-2.49	-1.14	-1.51	-2.63	-3.34	-1.71		-1.23				-1.74	-1.3
TWO-YEAR PROGRAMS																		
	General Liberal Arts:																	
55	Associate of Art	-.61	-.68		.67	-1.29	.12	-1.53		-.89	-.13		-.16		-1.45	-.52	-.70	-.3
56	General Studies	-.42	-.42		.27	-.50	-.23	-.56	-.22	-.19	.05	.24	-.08	.64		-.06	-.30	-.3
	Business and Commerce:																	
57	Commercial Music Recording	-.55	-.46		.17	-.52	-.33	-.10		-.40	-.49	1.24	-.25	-.72		-.72	[illegible]	-.9
58	Hotel/Motel Management	-.91			-.56	-2.20	-.17	-.93	-1.65	-1.35	-.75		-.53		-.76	-.18	-1.35	-1.2
59	Secretarial Science	-1.01	-1.10		.13	-.75	.35	-.18	-.47	-.78	-.39		-.68	.14		-.34	-1.00	-.9
	Health Service Curriculums:																	
60	Mental Health Assistants	-.99	-.94		.57	-1.20		-.77	-1.11		-1.20		-.38	-.42		-.13	-.89	-.0
61	Pediatric Assistants		.30			-.53							-.33	-.07			-.43	-.1
62	Respiratory Therapy	.38	1.43			-.14	.17	-.43		-1.41	-.65		-.34	.26		-.37		-1.4
	Non-Disciplinary:																	
63	Undeclared	-.30	-.21	-1.37	.08	-.59	.04	-.32	-.15	-.28	-.07		-.17	.11	-.35	-.20	-.30	-.3

ART 3

DISCIPLINE TYPE FOR 63 ACADEMIC MAJORS

ESTIMATORS

GER	HIST	HPRS	INS	IS	JOUR	MATH	MGT	MK	MUS	NURS	PHIL	PHYS	POLS	PSY	RE	SOC	SPCH	SPAN	SPE	UL
.77	.83	1.35		.76		.63	.49	1.09	1.30		.69	-.83	1.07	1.29	.62	1.00	2.24			.58
-.78	-.77	.97		-3.36		-1.51			.64		-.56	-2.57	-.70	-.83		-1.06		.22		
-.39	-.39			-.12	-.10	-.28		.29	.38	-.28	-.10	-.31	-.26	.32	-.20	.16	.33	.15		.83
-.04	-.49	1.23	.19	-.18	-.15	-.16	.25	.10	.32		-.20	-.32	-.27	.03	.14	.02	.22	-.08	.74	.32
	-.60		-.15	-.35		.10	-.01	-.05	-.38		.20	-.11	-.18	.42	.43	.06	-.60			
-.27	-.10	.42	.02	-.15	-.50	-.18	.53	.10	.18		-.03	-.46		.20	.15	.22	.32	-.17		
-.08	-.40	.52	.06	-.38	-.51	-.01	.22	-.04	.40		-.11	-.76	-.15	.06	.08	-.01	.18	-.11		
	-.37		.92	.30	.41	.38	.77	.35	1.87		.14	-.12	-.14	.63	.45	.39	-.03	.28		
-.10	-.69	.21	-.35	-.71	-.41	-.23	.08	-.28	.01	-1.26	-.54	-.71	-.42	-.23	-.23	-.27	.08	-.14		.31
-.51	-.76	.66	-.36	-.57	-.13	-.56	-.01	-.06	.21		-.55	-.31	-.39	-.16	.22	-.16	.13	-.09		.55
	-.68	.77	-.25	-.52	-.18	-.46	.06	-.12	.26		-.65	.43	-.47	-.15	.12	-.24	-.25			.29
.07	-.32	.84	-.09	-.89	-.18	-.16		-.09	.27		-.34	-.12	-.16	.02	-.24	-.06	.36	-.03	-.32	
-.38	-.38	.89	-.20	-.20	-.12	-.27	.21	-.005			-.14	-.57	-.18	.04	-.67	.11	.38	.004		
-2.97	-.75		.56	.60	.59	-.77	.38	.20	.14		-.68	-.45	-.05	-.23	.36	.43	.15			
	-.31				-1.57	.16			.45		-.07		-.06	-.14		-.75	.88	-.03		
	-.95	-.17	-.39	-.61		-.65	-.31	-.27	.23	-.76	-.42	-.30	-.80	-.40	-.36	-.58	.04	.67	.21	
-.81	-.69	.09			-.87	-.35	-.64	-.63	.10		-.55	-.53	-.64	-.48	-1.63	-.47	-.06	.11	-.43	
.29	-.64	.26		-.44	-.76	-.25	-.22	-1.32	.39	-2.21	-.22	-.52	-.53	-.13	-.36	-.33	.12	.01	-.36	-.99
-1.35	-.80	.35			-1.13	-.61		-1.62	.07		-.59	-.94	-.57	-.75		-.32	.45	.49	-.36	
-1.17	-.26	-.10	-.42	.17	-.58	-.14	-.44	-.51	.27		-.35	-.52	.01	-.06	-.50	.003	.40	-.08	-.12	-.71
-.66	-.52	.09	-.71	-.16	-.48	-.19	-1.23	-.97	.19	-.14	-.40	-.18	-.45	-.11		-.23	.12	-.44	.28	.04
-.05	-.21	1.61		-1.42	.60	.23	1.23	1.67	.09		.30	-.38	-.02	.42	-.04	.33	.61	-.39		.31
-1.08	-1.29	.67		-.51		-.93	-.63	-.52	-.27		-.94	-.66	-1.20	-.73	-.87	-.59	-.56	-.96		
-.46	-.46	.38	-.40		-.39	-.30	-.08	-.02	.12		-.13	-.51	-.37	-.06	-.13	-.04	.21	-.28	.58	-.33
-.25	-.59			-.42	.40	-.41	-.71	.39	-.21	-.20	-.20		-.95	.23		-.43	-.21	.18		
.11	-.19				-.55	-.72	-.67	-.51	.55		-.02	-1.19	-.54	.21		-.29	-.28	.16		
-.06	-.76	.30		.42	-.47	-.51	.88	-.81	.26		-.39	-.22	-.76	-.18	-.70	-.06	.54	.25		
-.23	-.31	.78		.40	-.58	-.11	.08	-1.00			-.21	-1.05	-.35	.34		.43	.30	.34		
.13	-.91		-.65	-1.23	-.70	-.46	-.43	-.53	.48	-.25	-.96	-1.03	-1.04	-.33	-.72	-.57	.13	-.83		
.26	-.28	.18	1.11	-.07	-.87	.32	.49	.96	.47		-.15	-.26	-.24	.52	1.20	.49	-.07	-.24		.09
-.05	-.46	1.02		.77	.28	-.16	.25	-.69	.57	.33	.09	.07	-.34	.43	.80	.29	.28	.15	-.08	.76
-.08	-.77	-.09				-.43			-.21		-.34	-.86	-.60	.43	-.28		.39	.04	1.26	
	-.42				-.77	.18					-.22	-.67	-.89	.43						
-.44	-.42	.14	.41	-.14	-.20	-.52	-.19	-.42	.14	-.13	-.15		-.32	-.06	-.40	-.14	.09	-.02		-.20
-.41	-.19	1.22		-.59	-.49	-.62	1.71		.27		.21		.04	.24	-.17		.16	.20		
-.33	-.68	.48	.26	-.23	-.52	-.19	.26	.12	.15		-.15	-.40	-.40	-.001	.36	-.06	-.32	-.44		-.24
-.63	-.56			.05	-.06	-.20	.15	.40	.08		-.50	-.32	-.36		.07	.29	.10	.38		
-.89	-.32			-.30	-.27	-.40	.10	-.86	.29		-.33	-.53	-.13	.45	.66	.28	.42	.39		
	-.69	.41		-.54		-.56	.42	-.56	.30		-.53	-.40	-.63	-.62	.44	.10	-.18	-.79		
-.29	-.43	.42	-.51	-.25	-.03	-.23	.14	.33	.23	.13	-.14	-.26	-.25	.20	.04	.11	.05	-.04	-.09	.27
-.39	-.36	.71			.11	-.32	-.28	.08	.32		-.05	-.93	-.30	.10		.10	-.15	-.13	-.17	-1.67
-.44	-.31			.09	.35	-.42	-.41	.78	.78		-.27		.09	.04		.22	-.15	-1.49		.10
-1.19	-.63	.13	-.59	-.67	-.35	-.45	-.28	-.61	.27	.30	-.49	-.73	-.35	-.04	-.31	-.21	.02	-.08	.60	-.09
	-.81		-.52	-.59		-2.15	-.74	-.73			-.44		-.39	-.38	-.82	-.70	.16			-.31
-.10	-.34	.69	.15	.08	-.23	-.63		-.84	.61		-.07	-.62	-.29	-.08	.06	-.09	.60	-.04		1.43
-.71	-.22	.24	.06	-.56	-.30	-.50	.11	-.45	.04		-.26	-.41	-.17	-.13	-.27	-.01	.24	-.39	-1.26	-.59
	-.60			-2.51	-.57	-1.46	-.71		-.06		-.36		-.08	-.36	-.19	-.54	-.40			-.26
	-.23		.21	-.23	.50	.15	.14				-.18		.11	.18	.36	.08	.11	.93		.28
-.88	-.42	.71	-.44	-.45	-.31	-.41	-.07	-.35	-.11		-.38	-.49	-.19	-.10	-.62	-.12	-.16	-.35		-.22
	-.30	.26	.21	-.52	-.18	-.28	.01	-.76	.25	.81	-.12		-.08	.18		.13	.48	-.63	.41	.36
-.66	-.59	.36	.57	-1.49	-.81	-.48	.16	-.07	.01	.19	-.26	-.96	-.28	-.002	-.30	-.09	.18	-.04		-.43
-.85	-.47	.59																		
	-.27		-.42	-.65	-.26	-.41	.002	-.42	.40		-.20	-.32	-.32	-.28	-.02	-.12	.11	-1.29		-.22
	-2.01		.14	.36		.15	.37	.08			.28		-.07	.60	.26	.37				.12
					-1.61	-1.95	-1.59	-1.55			-1.03		-1.16	-1.07	-2.42	-1.26	-.99			-1.46
	-.70		-.22	-.77	-.37	-1.37	.27	.20			.63		-.76	.10	.56	.39	.06	-.13		
-.36	-.56	.28	-.22	-.19	-.52	-.30	-.26	-.09	.14		-.36	-.53	-.31	.03	-.41	-.01	.12	.20		.94
.16	-.86	.69	.86	1.33	-.07	-.41	-.42	.07	.03		-.55	-.43	-.44	.13		.18	.36			
	-1.06	1.45	-.16	-.54		-1.01		-.63			-1.22		-1.13	-.79	-.58	-.50	-.25			
-.23	-1.15	.27				-.31	-1.00			-.39	.19	.17	-1.10	.01	-.74	-.22	-.18	-1.00	-.36	
	-.82	.11	-.95		-1.06	-.92	-.15			-.86	-.84	-.57	-.70	-.30		-.64	-.68	.31		
	-.58	.05		-.43		-.23			.27				-.50	.29		.06				.30
	-.57	.74				-.18	-.03	-.95	.91		-.90	-.58	-.40	-.09	-.09	-.03	.47	-1.00		
-.29	-.55	.51	-.16	-.43	-.14	.31	.08	-.16	.27	.11	-.26	-.43	-.28		-.08	-.12	.11	-.06	.20	-.02

Summary

This research effort has investigated the relationship between student course grades and program of study, controlling for student aptitude and longitudinal trends. Using the general linear model, regression equations for 62 major fields of study and a group of students without a declared major were presented. The study population consisted of 8,735 current undergraduate students as of Fall Quarter, 1975 who had attempted 40 credit hours of course work. The total number of individual grades was 189,013.

The findings of this analysis support the following conclusions:

1) Major field of study is a predictor of the grades received in courses throughout the university's curriculum offerings. For example, Psychology majors tend to receive higher grades on the average in psychology and educational foundation courses, while biology and history grades are generally lower for the group.

2) There was a consistent trend for certain components of the curriculum to have higher estimated grades than other parts. The physical sciences were generally the most difficult courses for all majors, including science majors. History courses were usually difficult for most majors excepting history majors. The courses in teacher education were generally shown to be those with the highest positive weights.

3) Grade distributions were shown to have an upward trend for 45 of 63 major categories (71%) while systematic grade inflation could be seen in 14 (22%) of the majors. No major had a deflationary trend in grades. In the Prather and Smith (1976b) study of 144 individual courses, however, it was found that 21% (29 of 140) of the individual courses studied showed an inflationary trend and 8% of the individual courses showed a deflationary trend.

4) The predictability of course grades by major was found to be consistent for this type of research. The goodness of fit (as measured by the R^2 adjusted for degrees of freedom) ranged from 25% to over 50% in accounting for the variance in individual course grades.

5) The estimated base grade (the constant term of each equation) was shown to vary by a factor of over one letter grade among the majors. This may be interpreted to indicate the presence of different grade standards among major fields (Goldman and Widawski, 1976).

Discussion

Student grades are but one measure of student learning. Cognitive education is not the only goal of a college, there being also societal and personal goals forming the "outcomes" of degree programs. The creative impulse is most surely independent of grades, for example.

Grades do, however, supply a perceived need of written progress reports. Grades are said to promote self-discipline and to be a valuable training for later experiences. After all, the competitiveness of life situations is manifested in grades which rank and sort individuals, though some scholars wonder where learning fits into the grading model.

The philosophy and rationale of grades, nevertheless, is not the aim or purpose of these series of research works of grading patterns. Rather, we have sought to develop a set of empirical reference points about grades in higher education that will, we hope, enlighten the normative and value-based debates of what standard ought to be reflected in letter grades. At the risk of repeating ourselves, we are presenting these empirical, research-based propositions concerning actual grade patterns. These propositions are a combination of previous research and that conducted in this series of reports on undergraduate grades. The propositions are as follows:

1) Grades have different values in different courses, and in differing curricula.
2) Grades are dependent on values and standards of individual teachers, but there is a strong and consistent pattern of grading by discipline.
3) The ability level of students influences both the major field the students select and how the disciplines set standards. That is, poorer students lean toward easy majors, while better students are likely to select more stringent-grading major fields.

4) Teachers generally adapt their grading practices to the ability and performance level of the student clientele.

5) The inflation in higher education is not so much that of grade inflation, but rather can be said to be course proliferation. As a consequence, there has been a decline in the market value of a college degree (Freeman, 1976).

6) Grades are often talked about in absolute terms, but the actual grading practices of teachers are relative. As student aptitudes increased in the early 1960's, grades did not show a corresponding increase. However, as scholastic aptitude levels have been decreasing, on the average, the grade-point-average has increased throughout higher education.

7) Poorer students are more likely to have a greater concern for grades alone, and the teachers and the curriculum are pressured to adjust (adapt) to this demand for grades as an end in themselves.

8) The cumulative GPA is not a totally reliable measure of student performance because GPA's are a mixture of grades from various disciplines. Course offerings require, after all, differing skills and have varying standards or demands on the students. The composite nature of the GPA theoretically should increase its reliability and validity, but this does not happen because of the reason stated above.

We do not maintain that these propositions are axiomatic or that they are not subject to challenge. Their presentation is meant to stimulate inquiry about the determinants of grades and possibly learning itself. The debate about grades has traditionally resided outside the empirical realm. We hope that these studies will remove the excuse to see grades in an *a priori* fashion alone, and will provide insight into the nature of grades and grading.

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